Vietnam Ministry of Health

Health Partnership Group

## Joint Annual Health Review 2011

### Strengthening management capacity and reforming health financing to implement the five-year health sector plan 2011–2015



Ha Noi December 2011

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### Preface

The Joint Annual Health Review (JAHR) 2011 is the fifth annual report resulting from collaboration between the Ministry of Health and health development partners. The JAHR 2011 was developed during the first year of implementing the Resolution of the Eleventh Party Congress and the Five-year plan for protection, care and promotion of the people's health, 2011–2015, and provides an update on the health status and determinants; an overview of the health sector's strategic orientation in the coming period; updates the health system situation and analyzes in depth topics on health financing and health system governance.

During the process of implementing the JAHR 2011 we have received enthusiastic support from many parties. We appreciate and highly esteem the technical and financial assistance from the Health Partnership Group (HPG), and especially wish to thank the financial support of WHO, Atlantic Philanthropies, AusAID, and USAID/PEPFAR.

The secretariat of the JAHR is under the direction of Nguyen Hoang Long, deputy director of the Department of Planning and finance, together with coordinators including Associate Professor Pham Trong Thanh, Sarah Bales, Duong Duc Thien and Duong Thu Hang have actively contributed to the organization of the process of developing and completing the report. We thank national consultants who participated in the analysis of existing information and collected ideas from stakeholders to draft each chapter, and continuously revised and refine them.

We are grateful for the valuable ideas and advice contributed by the Ministry of Health departments, administrations and other units, other ministries and sectors and localities, donors, organizations and individuals during the process of developing this report.

### Abbreviations

ADB	Asian Development Bank
AFB+	Acid-fast bacilli (test for tuberculosis)
ASEAN	Association of Southeast Asian Nations
AusAID	Australian Agency for International Development
CHITI	Central Health Information Technology Institute
CBR	Crude Birth Rate
CPR	Contraceptive Prevalence Rate
DALY	Disability adjusted life years
DRG	Diagnostic related groups
GAVI	Global Alliance on Vaccines and Immunization
GDP	Good distribution practice (in pharmaceuticals)
GDP	Gross domestic product
GLP	
GLP GMP-WHO	Good laboratory practices
	Good manufacturing practices of WHO
GPP	Good pharmacy practices
GSP	Good storage practices
HEMA	Health Care Support to the Poor of Northern Uplands and Central Highlands Project
HIV/AIDS	Human immuno-deficiency virus/ Acquired immuno-deficiency syndrome
HPG	Health Partnership Group
HTA	Health Technology Assessment
ICD	International Classification of Disease
IEC	Information, education, communication
IHP+	International Health Partnership and related initiatives
INGO	International non-governmental organizations
JAHR	Joint Annual Health Review
JANS	Joint Assessment of National Strategies
KICH	Key Improvements in Community Health Project
MDG	Millennium Development Goals
ODA	Official development assistance
OECD	Organization for Economic Cooperation and Development
PEPFAR	President's Emergency Plan for AIDS Relief
RIA	Regulatory Impact Assessment
SARS	Severe Acute Respiratory Syndrome
SAVY	Survey Assessment of Vietnamese Youth
TFR	Total fertility rate
UNAIDS	The Joint United Nations Program on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USD	US dollar
VND	Vietnam dong
VSS	Vietnam Social Security
WHO	World Health Organization
YLL	Years of life lost

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### Introduction

#### **Objectives of the JAHR report**

Since 2007, the Ministry of Health and the Health Partnership Group (HPG) agreed to collaborate every year to develop the Joint Annual Health Review (JAHR). The purpose of the Report is to "support annual planning of the Ministry of Health, and create a basis for selection of issues to focus on in cooperation and dialogue between the Vietnamese health sector and international partners."

The JAHR report has the responsibility to: (i) update the situation of the health sector, including assessment of progress in achieving MDGs and Vietnam's health development goals; (ii) update the situation in each of the health sector building blocks, the implementation of tasks assigned by the Government and recommendations of the JAHR from previous years; and (iii) analyze in-depth specific topics selected each year, in order to identify priorities and make recommendations for solutions.

Over the past few years, the JAHR has become an increasingly important contribution to the process of formulating and developing health policies, through (i) identifying priorities in the health sector based on analysis, assessment of achievements, progress and difficulties and limitations in the performance of the health system; (ii) monitoring and evaluating implementation of health policies and annual plans of the health sector; (iii) recommending additional tasks, policy refinements and other short-term and long-term measures.

The JAHR 2011 report is the fifth annual review, and was developed to implement the above objectives and tasks, specifically to support development of the 2012 annual health sector plan, and at the same time promote implementation of the five-year health sector plan for the period 2011–2015.

#### Contents and structure of the JAHR report

JAHR 2007 was the first report, it had relatively comprehensive scope covering the main components of the Vietnamese health sector. The 2008 and 2009 JAHR reports analyzed the specific topics of health financing and human resources for health – important components of the health system.

The JAHR 2010 report was developed at the time when the previous five-year planning cycle was coming to an end, and had the objective to support development of the five-year plan for the health sector for the period 2011–2015. One feature that stands out in the process of developing the JAHR 2010 report is the tight coordination and active contribution to the process of developing the five-year plan. The health system approach using six building blocks as recommended by the World Health Organization was used by the Ministry of Health for the first time in its development of the five-year plan on protection, care and promotion of the people's health 2011–2015.

Over five years of developing the JAHR report, a general structure of the JAHR has begun to take shape as follows (Figure 1):

• Every five years, on the threshold of the five-year plan (for example in 2010), the JAHR report must achieve the priority objective of supporting the health sector in the process of developing the five-year plan through: (i) in-depth analysis of health status and determinants; (ii) in-depth analysis of the six building blocks of the health system; (iii) refinements in the monitoring and evaluation indicators.

- In the first year of a five-year plan, besides the objective of the annual review, there is also a need to update the orientation decided upon by the Party Congress (every five years), and the five-year socio-economic development plan.
- Annually, the JAHR report must prioritize efforts towards developing the health sector annual plan of the following year through: (i) updating the assessment of health status and determinants; (ii) updating new policies and assessing implementation of tasks assigned to the health sector according to the six building blocks of the health system; (iii) analyze in depth specific narrow topics and propose appropriate solutions.

5-year planning cycle				
Year 1	Year 2	Year 3	Year 4	Year 5
(2011)	(2012)	(2013)	(2014)	(2010, 2015)
Support development of the annual plan for the following year i) <u>Update new</u> <u>orientations of</u> <u>the Party</u> <u>Congress and 5-</u> <u>year SEDP; ii)</u> update health status; iii) update new policies and assess implementation of assigned tasks by 6 building blocks; iv) in-depth analysis of specific issues and solutions. v) refine monitoring and evaluation indicators	Support development of the annual plan for the following year i) Update health status; ii) update new policies and assess implementation of assigned tasks by 6 building blocks; iii) in-depth analysis of specific issues and solutions	Support development of the annual plan for the following year i) Update health status; ii) update new policies and assess implementation of assigned tasks by 6 building blocks; iii) in-depth analysis of specific issues and solutions	Support development of the annual plan for the following year i) Update health status; ii) update new policies and assess implementation of assigned tasks by 6 building blocks; iii) in-depth analysis of specific issues and solutions	Support development of upcoming <u>5-year</u> <u>plan</u> i) <u>in-depth</u> <u>analysis</u> of health status and determinants; ii) <u>in-depth analysis</u> of implementation of 6 building blocks in health system, iii) refine monitoring and evaluation indicators.

#### Figure 1: Structure and main contents of the JAHR report

#### Contents and structure of the JAHR 2011 report

The JAHR 2011 report is being developed in the first year of the five-year plan with the focus on "Strengthening management capacity and reforming health financing to implement the five-year health sector plan 2011–2015," with contents and structure as follows:

Chapters belonging to Part I have the task of updating health status and determinants (Chapter 1); provide an overview of the health sector strategic orientation (Chapter 2); update the situation including new policies and implementation of assigned tasks according to the six

building blocks of the health system with recommendations for solutions to include in the 2012 plan or longer term plans (Chapters 3 through 8).

The in-depth chapters of Part II and Part III have the main task of analyzing selected issues in health financing and health system governance, aimed at determining priority issues and recommending solutions.

Part IV, includes the Conclusions and Recommendations chapters, with the tasks of synthesizing the main findings and assessment on achievements implementing the assigned tasks in each building block of the health system in Vietnam and recommending solutions to put into the 2012 plan and for the longer-term.

Appendix 1 provides a summary of information on priority issues and recommended solutions, facilitating the monitoring of performance in subsequent years.

Appendix 2 updates monitoring and evaluation indicators on main objectives of the health system selected for JAHR monitoring.

#### Methodology

**1. The general methodological approach** in the development of the JAHR 2011 is apparent in general requirements including:

- Grounded in the socio-economic context and situation of Vietnam's health system. The Vietnamese health system is undergoing reforms and development. In order to develop effectively, the important thing is to understand the situation of the health system, and its relationship to the socio-economic context in Vietnam, assess correctly progress, achievements, and at the same time to acknowledge clearly any problems that need to be resolved, areas that require investments, and results that need to be achieved, and mechanisms to monitor and control the reform process.
- Based on the perspectives about the health system functions and equity and efficiency criteria. The process of developing the JAHR 2011 report relied on the widely acknowledged perspective of a health system with six building blocks. Strengthening the health system means strengthening all six building blocks of the system and their interlinkages in order to improve equity and sustainability in health services and improve the health status of the population [1].
- Based on appropriate analytical frameworks for each building block of the health system. This includes analysis of national policies and legal documents, analysis following the criteria that each building block of the health system needs to satisfy.

**2. Methods used to develop the report are:** (i) Synthesize available reference materials, including policy and legal documents, research studies, surveys, etc.; and (ii) Collecting comments and feedback from stakeholders, especially managers, experts in the health sector and related ministries and sectors, and international experts.

*Collecting and processing available references,* includes legal documents (of the Communist Party, National Assembly, Government, Ministry of Health and other ministries); research studies, surveys; reports of ministries and sectoral agencies; specialized review reports; references of international and foreign organizations. The coordinator team found and supplied the JAHR team relevant references and major sources of statistical data; the national experts also actively found and shared relevant reference materials with the rest of the team.

Gather and process comments and feedback from stakeholders through the following steps:

Organize brainstorming sessions with experts (mainly national experts), in order to develop and refine the issues papers following a general model (matrix with key issues including situation, priority issues and solutions).

- Present and bring up issues for discussion at HPG workshops based on discussion matrices prepared in advance. Organize group discussions about specific topics through clearly listing issues in a concise and summarized manner, which has been more effective than previous organization of discussions.
- Making available all draft chapters on the JAHR website (www.JAHR.org.vn) in order to obtain feedback from domestic and international experts.
- Send out draft chapters for comments and feedback to related Ministry of Health departments and administrations, and other ministries and sectoral agencies.
- Technical group meetings, including national and international experts, in order to discuss technical issues related to the report.
- For each chapter, two to three peer reviewers, including health system managers, Ministry of Health experts, experts from related sectors, as well as international experts where appropriate, were asked to provide advice and contribute opinions throughout the process of developing the draft chapters and to review the final full report.

# 3. Analysis, determination of main issues, identification of priorities and solutions were implemented based on general principles and an approach that has been widely discussed and for which consensus has been achieved including:

*Shortcomings* (difficulties, challenges) are issues that are not yet appropriate, or remain weak because of a lack of factors ensuring their implementation, including lack of policies, implementation mechanisms, resources, management, leadership, technical solutions, or international cooperation, etc. This includes not only problems that are currently being faced, but also new challenges that have recently emerged because of requirements of development of the health system in the upcoming years. The basis for assessing shortcomings include: objectives of programs, plans and the health sector; criteria of equity, efficiency, development and quality.

**Priority issues** were identified on the basis of analysis, synthesis of many shortcomings. Priority issues are shortcomings or challenges that are: (i) the most urgent; (ii) of fundamental importance and key to resolving many other problems; (iii) feasible in the upcoming period. Priority issues have been identified by group of problem, including main problem and concrete issues. Based on these concrete issues, the underlying causes are identified in order to serve as a basis for proposing solutions.

**Recommendations and solutions** appropriate for each priority issue, based on the underlying causes that have been identified, including solutions related to policies, resources, management, leadership, as well as technical solutions and international cooperation for annual plans of the following year, as well as longer term solutions.

# 4. Monitoring and evaluation indicators of the JAHR report were selected and identified based on the following principles:

• Goals set by the National Assembly for the health sector;

- Goals assigned by the Government to the health sector in Decision No. 43/2010/QD-TTg;
- Indicators in the Strategy for the Protection, Care and Promotion of the People's Health 2011–2020.
- Millennium Development Goals to which Vietnam has made a commitment;
- Five-year health sector plan goals for the period 2011–2015;
- Goals reflecting three groups: inputs, processes, and outputs of the health system.

Indicators are classified into six6 groups including: (i) Core indicators; (ii) Overview indicators; (iii) Human resources for health; (iv) Health financing; (v) Drugs, biologicals, equipment; (vi) Health service delivery.

The supplementation and refinement of the monitoring and evaluation indicators focused on developing a set of core indicators for monitoring and evaluation of the impact of health financing policies and indicators of National Health Target Programs. Many indicators were disaggregated by region, sex or living standard quintiles to consider equity aspects and differentials across regions. In addition, indicators on non-communicable diseases such as cancer, hypertension, and diabetes were also added to the report in 2011.

#### **Organization and implementation**

As with previous years, the JAHR 2011 report was developed under the combined guidance of the Ministry of Health and the Health Partnership Group. The organization structure for managing report development included:

*Coordinators*, including representatives of the Ministry of Health (Planning and Finance Department), an international coordinator, a national coordinator and several support staff with responsibility for resolving daily issues of management and administration, organizing workshops, synthesizing comments and feedback, ensuring that the process of writing the report involves the participation of many stakeholders; editing, revising and finalizing the report.

*Experts*, including both national and international experts with knowledge and experience related to the various building blocks of the health system, with responsibility for drafting the chapters of the report, soliciting comments and feedback from related stakeholders, and completing chapters that respond to the feedback and comments.

## PART 1: UPDATE ON THE HEALTH SYSTEM

### **Chapter 1: Health Status and Determinants**

Since 2010, Vietnam has become a middle income country, but with incomes still at a low level but annual economic growth over 6%. Effects of the global economic crisis and climate change have slowed socio-economic development, and affected achievement of health goals. Nevertheless, in the past few years, the health status of Vietnamese people has seen some clear improvements, apparent in basic health indicators such as average life expectancy at birth, under five mortality rates, maternal mortality ratio and malnutrition.

#### 1. Implementation of national health goals

Health goals were set out in Prime Ministerial Decision No. 147/2000/QD-TTg dated 22 December 2000 approving the Vietnam Population Strategy 2001–2010; Prime Ministerial Decision No. 35/2001/QD-TTg dated 19 March 2001 on the Strategy for the care and protection of the people's health for the period 2001–2010, in Decision 153/2006/QD-TTg dated 30 June, 2006 approving the Master Plan for Development of the Health System in Vietnam to 2010 with a vision to 2020; Prime Ministerial Decision No. 170/2007/QD-TTg dated 8 November 2007 approving the National Target Program on Population and Family Planning 2006–2010; and annual health targets assigned by the National Assembly or found in various other legal documents. Table 1 summarizes the situation of implementing these goals and indicates that by the end of 2010 all major national health goals had been achieved or exceeded.

Indic	cator	2010 goal	Estimated level in 2010
1.	Reduction in fertility (‰)	0.2	0.3
2.	Crude birth rate (‰)	17.6	17.1
3.	Population growth rate (%)	1.14	1.05
4.	Average life expectancy (years)	72.0	73
5.	Maternal mortality ratio (per 100 000 live births)	70	68
6.	Infant mortality rate (‰)	<25.0	<16.0
7.	Under 5 mortality rate (‰)	<32.0	25.0
8.	Under 5 malnutrition rate (%)	<20	18.0

#### Table 1: Achievement of national health goals, 2010

Source: Plan for the protection, care and promotion of the people's health 2011–2015

#### Life expectancy

Life expectancy at birth of the Vietnamese people in recent years has increased considerably. The Census of Population and Housing 1 April, 2009 indicates that life expectancy at birth reached 72.8 years (70.2 for men and 75.6 for women), exceeding the goal of 72 years set for 2010. Vietnam has life expectancy that is higher by 10 years compared to many countries with similar levels of GDP per capita.

#### Infant mortality rate

In the period 1990–2009, the infant mortality rate fell from 44.4‰ to 16‰, only 0.12 percentage points short of the 2015 goal. Thus if this level of achievement continues to be maintained, Vietnam is quite capable of achieving the goal before the deadline.

The rapid decline in the infant mortality rate has contributed importantly to achieving reductions in under 5 mortality.

Although infant mortality rates have fallen in all regions, the pace of reduction is different across regions: the Northwest and Central Highlands have higher infant mortality rates and slower reductions in infant mortality compared to the national average

#### Under-five mortality rate

Vietnam has reduced by more than half the under-five mortality rate from 58‰ in 1990 to 24.5‰ in 2009 (estimate for 2010 is 25‰) and the goal for 2015 is to reduce to 19.3‰.

Currently the under-five mortality rate is similar to that of countries with GDP per capita three to four times higher than Vietnam. Vietnam has achieved a pace of reduction in under-five mortality that is more rapid than the average of countries in the Western Pacific region. Vietnam has exceeded its national goal as set out in the Strategy for protection and care of the people's health 2001–2010, to reduce under-five mortality to 36‰ by 2010.

Almost 75% of deaths to children over 1 year of age are due to accidents, including drowning and traffic accidents which are the two leading causes of death in recent years.

#### Maternal mortality ratio

Vietnam has achieved much progress in maternal health care. Physical facilities in hospitals and clinics and health worker training are gradually being improved with the aim that all mothers should have the ability to access reproductive health services.

Vietnam has reduced by almost two-thirds the maternal mortality ratio from 233/100 000 live births in 1990 to 69/100 00 live births in 2009, and it is estimated that this ratio has fallen to 68/100 000 live births in 2010. Nevertheless, during the period 2006–2009, maternal mortality has almost not changed, thus in order to achieve the goal set for 2015 of reducing maternal mortality ratio to 58.3/100 000 live births, Vietnam will need to make major efforts and policies and health programs will need to make some breakthroughs.

#### **Under 5 malnutrition rate**

Under 5 malnutrition rate measured by underweight has fallen dramatically, and was estimated to be at around 18% in 2010. The National Institute of Nutrition indicates that this rate has fallen regularly each year from 25.2% in 2005 to 21.2% in 2007 to 18.9% in 2009 and has achieved the plan goal of less than 20% by 2010. Nevertheless, regional differentials remain large. In the Central Highlands and Northwest child malnutrition rates remain the highest. In addition, child malnutrition in Vietnam is still higher than other countries in the region.

Under five malnutrition measured by stunting in 2009 had fallen to 29.3% [2]. Many urban areas and more developed regions have begun to face increases in over nutrition: overweight, obesity in children and in adults.

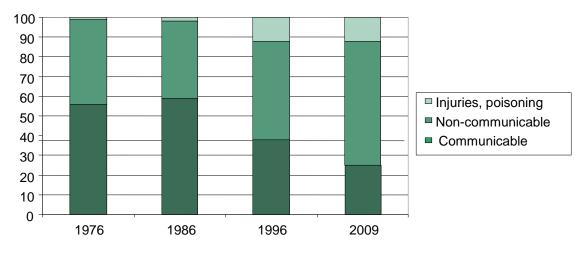
#### 2. Morbidity and mortality patterns and burden of disease

#### 2.1. Morbidity patterns

Morbidity patterns<sup>1</sup> in Vietnam currently indicate an epidemiological transition. Communicable diseases, malnutrition remain at high levels while non-communicable disease and accidents and injuries are increasing rapidly.

<sup>&</sup>lt;sup>1</sup> Based on hospital reports

According to statistical data from hospitals, the proportion of admissions due to communicable disease was about 55.5% in 1976, but has fallen to 22.0% by 2009. The non-communicable diseases account for a growing share, rising from 42.6% of all admissions in 1976 to 66.3% by 2009. The group of cases including poisoning, injury, accident has remained at about 10% for the past 10 years (Figure 2).



#### Figure 2: Changes in morbidity patterns, 1976~2009

*Reductions in certain diseases:* from 2000–2010, many communicable diseases, especially vaccine preventable diseases (diphtheria, pertussis, encephalitis), gastro-intestinal diseases (typhoid, dysentery), and meningitis have declined considerably compared to the previous decade (1990–1999). Among those, pertussis fell 93.1%, typhoid fell 11.7%, and dysentery fell 44.1% compared to 1990–1991 [3].

*Increases in other diseases* in recent years included communicable diseases like chicken pox, mumps have shown an increasing trend in the North compared to the period 1990–1999. Chicken pox increased from 39 753 cases in 1990–1999 to 129 745 cases from 2000–2010 (2.3 times increase); mumps increased 29.8 %. In 2010 some 25 558 cases of mumps were reported with 1 death in all provinces in the North, an increase of 56.83% compared to 2009 (16 297 cases, 0 deaths). In the past 4 years, the number of mumps cases has continued to increase.

Increased mobility, demographic change, in-migration, environmental pollution, along with poor sanitary habits among a large part of the population have contributed to facilitate the spread of communicable diseases, in particular highly infectious diseases that have not yet been included in the regular expanded program on immunizations such as chicken pox, mumps, hand-foot-mouth disease, rubella... In addition, the shortage of resources for active prevention strategies, targeted interventions is also an important reason for difficulties in controlling some diseases.

#### 2.2. Burden of disease

#### **Overall burden of disease**

Results of the first major study on burden of disease in Vietnam were released in 2011 [4]. They indicate that total burden of disease in Vietnam in 2008 was 12.3 million DALYs, with males accounting for 56% of disease burden. Premature death accounted for 56% of the total disease burden, for males this share was 60%, while among females it was 50%.

Non-communicable disease accounted for 66% of total burden of disease among men and 77% among women. Unintentional injuries (18%), cardio-vascular disease (17%) and mental illness (14%) were the main disease groups causing burden of disease among men, while among females the main causes of burden of disease were mental illness (22%), cardiovascular disease (18%) and cancer (12%). Among men, stroke was the leading single cause of burden of disease (10%), followed by traffic accidents (8%) and alcohol-related disorders (5%).

Among women, depression (12%) was the single leading cause of burden of disease, followed by stroke (10%) and vision loss (4%). Lower respiratory infections (pneumonia) was the leading cause of burden of disease in children, accounting for 11% of the total. Traffic accidents and HIV/AIDS accounted for one fourth of burden of disease among men aged 15–49. Depression and traffic accidents accounted for 32% of burden of disease among women in this age group. Stroke is the leading cause of burden of disease among men (14%) and women (9%) in the age group 45–69. In the age group 70 and older, stroke accounted for 22% of DALYs in men and 24% in women.

#### Burden of disease due to premature mortality

Burden of disease due to premature mortality from disease and injury among men in Vietnam in 2008 was 4.1 million years of life lost (YLL) and among women 2.7 million years of life lost. The main causes of years of life lost in 2008 included cardio-vascular disease (27%), cancer (22%) and unintentional injuries (14%). Stroke (14%), traffic accidents (9%) and liver cancer (7%) were the main causes of years of life lost among men. Stroke (17%), traffic accidents (4%) and pneumonia (4%) were the 3 leading causes of years of life lost among women. The top 10 causes of years of life lost account for 58% of total burden of disease due to premature mortality in males and 51% in females.

#### Burden of disease due to disability

Burden of disease due to disability overall in Vietnam in 2008 was 2.7 million years of healthy life lost to disability. Mental illness (37%), unintentional injury (14%) and sense organ disabilities (9%) were the three leading causes of burden of disease due to disability. Depression (20%) was the leading cause of burden of disease due to disability, followed by vision loss (9%) and alcohol use disorders (8%). Among men in Vietnam, alcohol use disorders (14%), depression (11%) and traffic accidents (8%) were the three leading causes of years of healthy life lost to disability. Depression (29%), vision loss (10%) and osteoarthritis (9%) were the three leading causes of years of healthy life lost due to disability. The 10 leading causes of years of healthy life lost to disability accounted for 29% of total burden of disease from disabilities in men and 19% in women.

#### 3. Situation of selected communicable diseases

#### Influenza A(H1N1)

From the beginning of 2011 to the present, according to results of national influenza surveillance, Vietnam has registered the appearance of 3 influenza virus types, A(H1N1), A(H3N2) and B. The A(H1N1) virus was recorded in 40 provinces, with 498 cases testing positive, among those 13 cases died in 10 localities; deaths were primarily among people with chronic co-morbidities, accounting for 61.5%.

#### **Dengue hemorrhagic fever**

In the past 5 years, the number of cases of dengue fever has continuously increased, and the dengue fever epidemic is no longer limited mainly to the southern and central provinces, but has spread throughout the country. Nevertheless in 2010, the number of cases of suspected clinical dengue fever reported in 21 out 28 provinces in the North with a total of 5360 cases, a reduction of 71% compared to 2009 (18 485) and no deaths occurred. Developments of dengue fever in the North in 2010 are similar to that of previous years, suspected dengue cases begin to appear in July and August, with the peak of the epidemic around September through November. Incidence is concentrated mainly in adults and older children (over 15) (85% of total cases). In 2010 in the North, all 4 serotypes of the virus were present, but the D1 serotype still predominates (63%), followed by type D2 (18%), D3 (15%) and D4 (4%). From 2004 to the present, D1 and D2 are still the most prevalent types found in the North [3].

#### Dangerous acute watery diarrhea (cholera)

After many years of control, acute water diarrhea has shown a resurgence since 2007 with a morbidity rate of 22.4/100 000 people. In the period from 2000 to 2009, the North recorded 8304 cases of cholera, an increase of 6 times compared to the period 1990–1999 (only 1194 cases). In March 2010, the first case in the North was detected in Ha Noi. From the end of April through September 2010, cases occurred primarily in meals served to large groups in Ha Nam, Hai Duong, Bac Ninh,..., and the epidemic occurred in 7 provinces (Ha Noi, Bac Ninh, Hai Duong, Hai Phong, Ha Nam, Nam Dinh and Thanh Hoa). Ha Noi was the locality with the highest number of cases (233 cases, 52% of all cases), followed by Hai Duong (80 cases). Most patients were in the age group 15–39 years of age (51.12%) [3]. Cumulatively from the beginning of 2011 to the present, nationally 2 cases of cholera have been reported in 2 locations (Ho Chi Minh City and Can Tho); no deaths have occurred. Compared to the same period in 2010, this represents a reduction by 98.3%.

#### Measles

From the end of 2008 to mid-2010 a large outbreak of measles occurred throughout the country. Vietnam recorded the longest measles outbreak with the largest scale since 2002. In the period of 21 months, the measles outbreak occurred in all provinces with 9434 cases. The outbreak was concentrated in the age groups 1 to 6 and 18 to 26 years. Every year about 10% of children below age 1 year remain unvaccinated against measles, and after a cycle of 3–4 years, the number of children without immunity against measles accumulated to several million children before these children received a booster shot at age 6. Thus measles had the right conditions for a resurgence leading to outbreaks in some areas.

#### Rubella

According to incomplete reports, the total number of rubella cases increased compared to the average incidence in the past 5 years. In some pediatrics hospitals, the number of children with congenital rubella syndrome has shown an increase compared to previous years. Up till now, rubella is not yet included in the national expanded program of immunizations because the disease was not widespread. Because of this, most of the population does not have antibodies to this disease. However in 2011, the disease has broken out into an epidemic, lasting from the beginning of the year till June, the number of cases is large, with a large number of pregnant women being infected, among whom many have chosen to abort their fetuses. If women are infected with rubella in the first trimester there is a high probability that the child will have congenital rubella syndrome (with disabilities like:

blindness, deafness, slow development, congenital heart disease...) of up to 90%. The National Institute of Hygiene and Epidemiology has recently submitted to the Ministry of Health a plan for rubella control in Vietnam, with inclusion of rubella vaccine into the expanded program on immunization for all women in childbearing ages (15–35 years) [5].

#### Human streptococcus suis

Human streptococcus suis is a zoonotic disease. Counting only the period from 2007–2009, 44 cases of human streptococcus suis were recorded in Vietnam, among whom 6 cases were fatal. The disease has occurred in 13 provinces in the North. In 2010, in the North 56 cases of human streptococcus suis were reported, with cases concentrated in northern delta provinces. Seven of these cases died, all in Ninh Binh province [3].

#### Hand, foot and mouth disease

According to disease surveillance reports of the Pasteur Institute and Institute of Epidemiology, up till 15 August 2011, the number of cases of hand, foot and mouth disease in the whole country reached 30 000, three times higher compared to 2010, and the number of deaths had risen to 80 cases, the second highest in the world after China with 353 deaths. According to the Ho Chi Minh City Pasteur Institute, the incidence of hand, foot and mouth disease is highest in Binh Duong province (143 cases per 100 000 population), followed by Ba Ria-Vung Tau (136 cases per 100 000 population), Dong Nai (130/100 000 population), and Ho Chi Minh City has the seventh highest rate at 79 cases per 100 000 population. According to the Pasteur Institute in Ho Chi Minh City, hand, foot and mouth disease will have another spike from September to November 2011. In the two years 2009 and 2010, there were only a total of 10 000 cases of hand, foot and mouth disease is concentrated mainly in the age groups one to three. This is an emerging disease and dangerous to children.

Currently, many localities continue to record new cases, mainly in pediatrics patients especially in Ho Chi Minh City, Quang Ngai, Ninh Binh. In Ninh Binh province, the provincial obstetrics-pediatrics hospital has received 300 cases of hand, foot and mouth disease in the past 2 months of which 60% were infected with the EV71 virus [6].

#### Malaria

Malaria was pushed back and reduced to low levels in many localities where it had previously been endemic. In 2006, the incidence of malaria was 108.9/100 000 people, by 2009 it had fallen to 70.8 per 100 000 people (some 27.6% of the nation's population lives in malaria endemic regions). Nevertheless, the risk of malaria resurging in some regions is high, especially in mountainous, forest areas and coastal swamps, areas with a large number of ethnic minorities, remote, border and isolated areas [7].

#### Tuberculosis

In the period 2004–2009, the pulmonary tuberculosis detection rate (AFB+) fell gradually each year in the north, central and southern regions. However, in the southern region, it is estimated that in 2009 the tuberculosis detection rate (AFB+) began to increase at a rate higher than in 2007–2008. The pulmonary tuberculosis detection rate fell most strongly in the North from  $51.9/100\ 000$  in 2004 to  $40.5/100\ 000$  in 2009 (22% decline); in the Central region it fell 16% while in the South it fell the least at nearly 9%. Nationally, the pulmonary tuberculosis detection rate per 100\ 000\ was estimated to have fallen by about 14% between

2004 and 2009. The male-female ratio of AFB+ pulmonary tuberculosis has increased gradually each year from 2.61 in 2004 to 2.88 in 2009 [8].

Multi-drug resistant tuberculosis and tuberculosis in HIV patients continues to be a serious problem that needs early resolution. In 2008, in Vietnam, among the 10 leading causes of death, tuberculosis was ranked seventh for men and eighth for women [4].

#### **HIV/AIDS**

In the world, on average about 1 million people are dying of AIDS. According to reports from localities, up to 30 June 2011, the total number of people living with HIV had reached 190 902 cases, and the number of AIDS patients currently alive had accumulated to 46 056, with cumulative deaths from AIDS of 50 108 people. The HIV/AIDS situation in the first 6 months of 2011: nationally there was a slight decline in the number of new HIV infections, number of AIDS patients and number of HIV/AIDS deaths, with a total of 6146 newly reported HIV infections, among which were 2477 AIDS patients and 844 deaths. Among the total cases detected in the first quarter of 2011, 69% were male, 31% female. Compared to the same period in 2010 and previous years, the distribution of HIV cases by gender has changed, with an increasing share of women infected due to risk of infection from an infected husband or sexual partner. Among total cases of HIV infection reported in the first quarter of 2011, the proportion infected with HIV through blood and sexual relations account for the highest share and are on par with each other. Blood related infections accounted for 45% (reduction of 2.5% compared to the first quarter of 2010), and the proportion infected through sex accounted for 43% (increase of 4.3% compared to the first quarter of 2010), and the proportion of HIV cases transmitted from mother to child accounted for 3% [9].

#### 4. Determinants of health

#### Socio-economic factors

In the past few years, with appropriate policies, Vietnam's economy has continued to grow at a steady rate. Economic growth has been maintained at 6–7% per year. Gross national income (GNI) per capita has increased from 130 USD in 1990 to 1010 USD in 2009, and estimates for the year 2010 are at 1200 USD per capita.

Rapid and stable economic development are favorable conditions to increase investments in health and to increase spending on social welfare. According to data from the World Health Organization, countries with GDP per capita from 2170–3209 USD (PPP\$), like Vietnam, on average have total health spending at 6.2% of GDP, and public spending on health accounting for 11.0% of total state budget spending each year. In addition, with a developing economy, there are positive influences to many other factors that help to improve the health of the people.

However, during the process of economic development, the gap between the rich and the poor, and between different regions, between different demographic groups tends to increase. This is an important factor that affects inequalities in access and use of health services, and thus affects differentials in health status between different demographic groups.

#### **Demographic factors**

Since 2005 Vietnam has achieved replacement fertility and has continued to maintain this low level of fertility over the past 5 years. Awareness, attitudes and behavior regarding population and family planning and reproductive health among different groups in society,

including among men, have changed in a positive direction. Small family size is increasingly being accepted. Some major cities have begun to see reductions in fertility along with aging of the population and increasing imbalance in sex ratios.

The population of Vietnam is large and increasing, and is experiencing major changes in population structure, with the proportion of the population under age 15 falling from 33.1% in 1999 to 25% in 2009, the share of the population aged 15–59 (working ages) increasing from 59% in 1999 to 66% in 2009, and the age group aged 60 years and older increasing from 8% in 1999 to 9% in 2009. The aging index of the population (total population over age 60 divided by population under age 15) increased 11.4 percentage points from 24.3% in 1999 to 35.7% in 2009. This entails increasing requirements for health care of the elderly in the coming years. At the same time, the cohort of women entering reproductive years is very large, and this will affect the need for reproductive health services and pediatric care.

The imbalance in sex ratio at birth is an important problem that requires an urgent solution. The sex ratio at birth (number of boys born for every 100 girls born) has increased strongly over the past 10 years, most clearly over the past 5 years. By 2010 the sex ratio at birth is estimated at 111.2 boys per 100 girls.

#### Industrialization, urbanization, migration and lifestyle changes

Rapid urbanization and industrialization have created major challenges for health care. Up to the present about 29.6% of the population is living in urban areas compared to 23.7% in 1999. When Vietnam becomes an industrialized country the proportion of the population living in urban areas will exceed 50%. Urban life along with increased stress are risk factors for mental illness, cardio-vascular disease and other non-communicable diseases. Industrialization increases the risk of environmental pollution, especially since laws on environmental protection are still inadequate. There are many challenges with water pollution, air pollution and solid waste in communities not only in urban areas but also in rural areas. The risks from polluted industrial and agricultural work environments are also increasing.

Experience from many developing countries shows that with incomes below 10 000 USD per capita per year, economic growth is positively correlated with increasing pollution because of inadequate ability to invest in methods to control pollution. Thus in the next decade, Vietnam will continue to face difficulties in controlling environmental pollution effectively.

Because of differential economic development between different regions, migration is relatively widespread, leading to some provinces seeing no increase in population over the past decade, or even decreasing by 3%. Workers moving from rural to urban areas to find employment during the slow agricultural season increases the risk of disease and social vices spreading from urban to rural areas, especially sexually transmitted diseases and HIV/AIDS. Lessons from other countries in the region are a warning to Vietnam about the risks to health from the development process.

Migration is an issue that creates pressures on health care services for the people in urban areas as well as in new economic zones receiving migrants in rural and mountainous areas.

#### **Climate change**

Vietnam is one of 10 countries predicted to be most affected by climate change and rising ocean levels. In addition, natural disasters strongly influence health of the people due to consequences such as loss of clean water, loss of large tracts of land for planting rice in the Mekong River Delta, and this will cause consequences for food security, changes in the living environment, destruction of public infrastructure, including health facilities, migrations of people on a large scale.

#### Housing and environment

According to preliminary results of the Census of Housing and Population 1 April 2009, 67% of households use clean water, 54% use sanitary toilets [10]. Along with the process of industrialization and urbanization, urban environmental pollution, air and water pollution are becoming increasingly serious problems, affecting directly the health of the people. Urban air pollution is primarily from traffic (70%) because of excessive numbers of cars, motorcycles and because the cities are still being built and urbanization is occurring very strongly [11]. Many acute and chronic diseases are arising due to contact with pollutants.

The work environment and working conditions have been improved considerably, especially since investors and manufacturing facilities have begun to import technology production lines. Nevertheless, in some production facilities obsolete production lines are being used causing pollution in the workplace. For small enterprises, private enterprises, traditional occupations, working conditions are not monitored or monitored at a very low level. A large workforce has moved from rural to urban areas to earn a living with many hazardous jobs, working conditions of these people are not ensured, there are many risk factors for health status and disease while there is inadequate support from the occupational health fields [11].

#### Lifestyle factors

*Smoking* is the most preventable cause of death in the world. Consumption of tobacco in Vietnam is starting to see a decline: in 2002, male smoking prevalence was 56% and in 2010 this rate was down to 47.4%. Among women, smoking prevalence has also fallen and is currently at 1.4% [12]. Combining men and women, overall 23.8% of adults currently smoke (15.3 million adults). Among these 81.8% smoke every day, 83.7% smoke cigarettes and 26.9% smoke water pipes. About 69% of daily smokers smoke 10 or more cigarettes per day while 29.3% smoke 20 cigarettes or higher per day. The average age at initiation of daily smoking is 19.8 years. Approximately 73.1% of adults (47 million people) aged 18 and older report that they are exposed to secondary smoke at home (77.2% among men and 69.2 among women). Besides the burden of disease and mortality, smoking creates a financial burden. There are regulations forbidding smoking in public places, crowded places, but implementation of non-smoking areas, and imposing sanctions have so far proven inadequate so they have almost no impact in practice. Some solutions on IEC, prevention of advertising, limitations in distribution, increased taxes... have been implemented but not strongly enough and effectiveness remains low.

*Use of alcoholic beverages:* according to the National Health Survey 2001–2002, the proportion of men aged 15 and older who drink alcohol is 46%. The proportion using alcoholic beverages is higher in groups with higher levels of education: about 40% of men with lower secondary and lower education drink alcohol, while among men with education beyond secondary school, including in both urban and rural areas is about 60%. According to

the Survey Assessment of Vietnamese Youth (SAVY1 and SAVY2), the proportion of youths aged 14–17 who have drunk 1 or more cups of beer or alcoholic beverage in 2004 was 35%, but this proportion had increased to 47.5% by 2009, similarly for the age group 18–21 the proportion who reported having finished 1 or more servings of alcohol was 57.9% in 2004 but had increased to 66.9% by 2009 [13].

*Nutrition and diet:* In general, the current Vietnamese diet consists of a lot of vegetables and fruit, with low levels of fats, and this is very beneficial to health. However, this situation may change very rapidly, especially as the economy develops and it becomes easier to access foods that are high in calories, and this risk tends to be higher among regions with low educational levels that are not facing food shortages.

Overweight and obesity have become community health problems in many regions of the world, and globally there are more than 250 million obese people, which leads to rapid increases in the number of people with chronic disease and increasing costs for treatment and prevention. The overweight rate among Vietnamese adults in 2000 was 5.4% in urban areas and 1.7% in rural areas [3]. The overweight rate among children was about 1.3% for children under age 5 and 0.8% for children aged 5 to 10 years [11].

*Narcotics and prostitution*: The number of people using drugs in Vietnam has increased rapidly in recent years, especially among young people. In 2009, nationally there were about 125 000 drug addicts [14]. Drug addicts have a high rate of HIV infection, accounting for approximately 50% of all HIV cases reported [15]. HIV/AIDS is strongly related to use of intravenous drugs, and it is estimated that 38.6% of HIV infected people were infected through intravenous drug use [9]. The proportion of drug addicts who have had sex with prostitutes in the past 12 months is estimated in the range from 18% to 59%, thus the risk of transmitting HIV among intravenous drug users, prostitutes and their sexual partners is rather high.

*Domestic violence:* Results of the national survey on domestic violence 2009–2010 covering 4838 ever married women in 63 provinces indicate that 32% of women report suffering from physical violence in their life and 6% reported physical violence within the past 12 months. Some 10% of ever-married women report that they have experienced sexual violence in their life and 4% report sexual violence in the past 12 months.

The results indicate that emotional abuse is at high levels: 54% of women report suffering from emotional abuse in their life and 25% reported emotional violence in the past 12 months. The proportion of women suffering physical violence and/or sexual violence in their lifetime and in the past 12 months throughout the country is 34% and 9%. In synthesizing results of all three types of violence perpetrated by their husband indicates that more than one half (58%) of women report suffering at least one of these types of abuse in their lifetime (physical, sexual or emotional). This proportion in the past 12 months is at 27%.

In the survey, 26% of women who reported either physical or sexual violence from their husbands indicated that they had suffered injuries as a direct consequence of this violence. Among these cases, 60% reported that they had suffered injuries more than once and 17% reported being injured many times. About 5% of women who had ever been pregnant reported physical violence during their pregnancy.

About 15% of women who reported physical or sexual abuse from their husbands also indicated that their health was poor or very poor (compared to 9% of women who have not experience physical or sexual violence). Women who have been abused by their husbands tend to experience problems with mobility or implementing every day activities, suffer pain and loss of memory, miscarriage or abortion. Among women who have suffered severe

violence, the risk of emotional stress and consideration of suicide is 3 times higher than among women not experiencing violence from their husband [16].

#### 5. Implementation of recommended solutions from 2010

In the 2010 JAHR, several key health issues were identified and solutions proposed. This section reviews the implementation of those solutions during the past year.

The first problem identified was the rather large differentials in health status across regions and living standards groups as evidenced by several health indicators like infant mortality rates, malnutrition rates, maternal mortality ratio. It was proposed to continue to prioritize and strengthen investments in developing grassroots healthcare, and health services in the mountainous, remote, isolated and disadvantaged areas. In addition, recommendations were made to continue to strengthen and implement effectively solutions to support health care for disadvantaged groups (the poor, near poor, children under age 6, the elderly, ethnic minorities and other social welfare beneficiaries.)

The proportion of communes that meet national commune health benchmarks continues to increase, thanks to improvements in personnel and other standards. Technology transfer to lower levels has been achieved through mentoring and seconding staff from higher level facilities (Project 1816/QD-BYT). In addition, health insurance now covers 15.8 million poor people and ethnic minorities and state budget spending to ensure health insurance coverage for vulnerable groups continues to increase rapidly and there are subsidies to assist the near poor to obtain health insurance.

Despite the efforts made to date, quality of commune health services and budget allocations to this level of care remain poor. Costs not covered by health insurance continue to cause impediments for the poor to seek care and the near poor are still not participating in health insurance despite subsidies for premiums.

The second problem identified is that perinatal mortality remains high, accounting for 70% of all mortality to children under 1 and 50% of all mortality to children under 5. Underweight malnutrition has fallen dramatically, but stunting remains high and widespread in all regions.

The solutions proposed were to continue to strengthen investments in national target programs for the 2011–2015 period, especially programs and projects related to reproductive health, to strengthen interventions aimed at reducing maternal mortality perinatal mortality and child malnutrition (especially stunting).

The Prime Minister has approved the list of National Target Programs for 2011–2015 including the National target program on population and family planning and projects on reproductive health and malnutrition, and the Ministry of Health is developing the contents of these projects. The 5-year plan for 2011–2015 and the draft Strategy for the protection, care and promotion of the people's health 2011–2020 and vision to 2030 place high priority on interventions in this area. However, barriers to access in terms of geography and poverty still hinder progress in implementing these interventions.

The third problem identified was that the morbidity and mortality patterns are changing towards increased incidence and prevalence of chronic and non-communicable diseases, accidents and injuries and the consequent increase in need for medical care. Some communicable diseases are at risk of resurgence while some newly emerging diseases are developing in complex ways that are hard to predict in Vietnam and globally. Solutions proposed to resolve these problems were to develop and implement strategies and policies for the health sector that take into account the increasing burden of disease from non-communicable diseases, and in particular policies that expand and improve effectiveness of interventions to control non-communicable disease and deal with newly emerging diseases through increased intersectoral and international cooperation.

The 5-year health sector plan for 2011–2015 has been approved and includes activities to control non-communicable diseases, and to promote greater intersectoral coordination, especially between the Ministry of Agriculture and Ministry of Health in zoonotic diseases and food safety issues. International cooperation continues to be consolidated in the Greater Mekong Subregion (GMS) and Mekong Basin Disease Surveillance (MBDS) projects and other projects focused on control of newly emerging diseases. However investments and efforts to control non-communicable diseases remain inadequate. Care and management of chronically ill patients at the commune level, most accessible to the people, remains weak.

The fourth problem is the increasing trend in risk factors to health such as environmental pollution, lack of food safety and hygiene, labor accidents, spread of disease from globalization, climate change, and problems of lifestyle (tobacco use, narcotic abuse, alcohol abuse, unsafe sex), and demographic change.

It was recommended to increase priority in allocating funds for health, with a greater emphasis on disease prevention and health promotion. In addition, there was a call for strengthened coordination among ministries and sectors to develop and implement long-term strategies for environmental health and public health.

In recent years important steps have been achieved in terms of developing a master plan for medical waste treatment, and national standards, regulations and guidelines for environmental health, food safety, occupational health. Separate agencies for food safety and for environmental health have been set up at different levels of the system and are being strengthened.

However, intersectoral cooperation remains weak in the area of preventive medicine and public health, people's awareness of risk factors to health, traffic and labor safety, food hygiene and safety remain weak. Behavior change communication related to lifestyle factors has been paid inadequate attention and remains ineffective.

# Chapter 2: Overview of Major Orientation for the Health Sector

#### 1. Background

Over the next 5 years, the operations and development of the Vietnamese health system will take place in an environment in which the entire nation continues to pursue strong comprehensive reforms, industrialization, modernization, global integration, economic, cultural and social development. This advantageous situation is also beset with new requirements and challenges.

#### Strengths:

The Communist Party, National Assembly and Government continue to further clarify the important role of health care in implementing progress and social equity, improving quality of life of the people, satisfying requirements of industrialization, modernization and consider investing in health as investing directly in sustainable development.

The awareness and participation of the people, all levels of the Communist Party and authorities in health care is expanding and deepening; intersectoral collaboration in health care is increasingly widespread and effective.

Economic growth<sup>2</sup> will contribute to improving living standards and health status of the population, and at the same time, facilitates increasing Government investments in health care [17].

Although Vietnam has become a lower middle-income country, external assistance (including official development assistance [ODA] and international non-governmental organizations [INGOs]), technical assistance and international cooperation in health care have been maintained, creating opportunities for the health sector to continue to develop.

#### Challenges:

The people's need and demand for health care is increasing. Morbidity patterns are changing with an increase in non-communicable diseases, accidents, injuries, and the risk of re-emergence of some communicable diseases, newly emerging disease epidemics and unusual diseases that evolve in an unpredictable manner.

Risk factors negatively affecting health are tending to increase, such as environmental pollution, food safety hazards, labor and traffic accidents, climate change, lifestyle changes and population dynamics.

The quality of the work to care and protect the people's health remains low [17], not satisfying requirements for health care examination and treatment of the people, especially the poor, residents of remote, isolated and ethnic minority areas. Many health facilities have fallen into disrepair; there is a shortage of health workers and many health workers have low level of qualifications, while the structure and distribution of health workers is imbalanced.

<sup>&</sup>lt;sup>2</sup> The average economic growth rate over the period 2011–2015 is forecast to be 7.0–7.5%/year. In 2015, GDP pre capita is expected to be about 2000 USD; Poverty rates are expected to fall by 1.5–2%/year; the proportion of workers in agriculture will gradually decline, and by 2015 are expected to account for from 40–41% of the workforce. The income of rural residence is expected to increase 1.8 to 2 times compared to 2010

Challenges in making of policies, strategies and operating mechanisms to meet the requirements of reform and strengthening of the health sector with an orientation towards equity, efficiency and quality in the context of a market economy with many policies having multi-directional impacts on health sector activities and widening disparities between the rich and the poor.

# 2. Eleventh Party Congress documents on the direction and duties of the health sector

The year 2011 is the initial year for implementing the Resolution of the Eleventh Party Congress in all sectors and localities.

The major orientation for the socio-economic development strategy, as well as the direction and tasks of protection, care and promotion of the people's health were determined at the Eleventh Party Congress, and this is the basis for the health sector to implement activities of the sector over the next 5 years, including:

# 2.1. Overall goal over the next 5 years is: "... intensify comprehensive of reforms; ... create the foundation so that by the year 2020, Vietnam will have essentially become a modern industrialized country."

In order to implement the above goal, along with economic development, culture, human resource development, science, technology, knowledge economy, national defense and security, democracy, and strength of national solidarity, development and reorganization of the Communist Party, the Eleventh Party Congress also emphasized the task of: "creating clear progress in implementing progress and social equity, ensuring social protection, reducing the share of households living in poverty; improving conditions for caring for the people's health."

The above orientation indicates that the health sector needs to continue to: a) implement "comprehensive reform", contribute to achieving social equity, ensuring social protection, improving quality of life; b) create a multi-dimensional foundation for new steps in health sector development, as Vietnam becomes a modern industrial nation; c) improve quality (quality of human resources, quality of services), improve performance, mobilize and utilize resources effectively.

# **2.2.** Develop health activities as one of the factors to ensure effective implementation of social progress and equity in each development phase and policy

This is the orientation that was raised in all Party Congresses in the past and in 2005 in Politburo Resolution 46,<sup>3</sup> and the orientation that the health sector needs to continue to specify concrete actions for implementation. In Resolution 46, tasks assigned to the health sector are: a) improve quality of health care for the people, population and family planning work, and protection and care of mothers and children; b) continue to revise and complete the health insurance system to ensure social protection.

According to this orientation, it is necessary to strive for social equity in health care of the people even among current limited conditions and equity must be apparent in all concrete mechanisms, policies of the health sector, including in health financing, health service

<sup>&</sup>lt;sup>3</sup> Resolution 46 : "Reform and refine the health sector with an orientation towards equity, efficiency and development, in order to create advantageous opportunities for the protection, care and promotion of the people's health, of increasing quality and appropriate for the socio-economic development level of the country."

delivery, human resources for health,... as well as in related policies of other sectors and agencies in order to improve health equity.

# 2.3. Socio-economic Development Strategy 2011–2020 approved by the Eleventh Party Congress specified: "Strongly develop the health sector, improve the quality of health care for the people"

The specific tasks in providing health care for the people raised in the Socioeconomic Development Strategy 2011–2020 express the steadfast perspective of reforming the health sector with an orientation towards equity, efficiency and development that the health sector needs to continue to implement, emphasizing the requirement for "improving quality of health care for the people" The Eleventh Party Congress documents also indicate clearly that health services and the pharmaceutical industry are service and industrial sectors for which Vietnam has comparative advantages, that contain strong intellectual and high technology content, with potential to contribute to growth of GDP, and thus should be focused on for development.

In particular:

- On development of the health care network and improving quality of health services: rapidly develop the public and private health sectors; complete the organizational model and consolidate the grassroots health network. Develop some curative care facilities on par with regional standards. Encourage investors of all economic sectors to set up high quality specialized medical facilities.
- Reform the operational mechanism and especially the financial mechanism of public sector health facilities with an orientation towards autonomy, openness and transparency.
- Standardize health service quality, hospital quality, gradually approach regional and international standards.
- Reform and refine to ensure consistency in policies for health insurance, examination and treatment and appropriate user fees; put in place a roadmap to achieve universal health insurance coverage.
- Implement effectively policies on examination and treatment for all social welfare policy beneficiaries, the poor, children and ethnic minorities, care for the health of the elderly.
- Strengthen training and improve quality of professional skills, medical ethics, accountability of health workers. Strive by the year 2020 that all communes and wards will have a medical doctor.
- Develop strongly preventive medicine, prevent major epidemics from breaking out. Continue to control and reduce strongly the spread of HIV. Continue to reduce the child malnutrition rate. Improve food quality and ensure food hygiene and safety.
- Develop rapidly the pharmaceutical and medical equipment industries. Develop strongly traditional medicine combined with modern medicine. Tightly manage production and distribution of pharmaceuticals.
- Implement effectively policies on population and family planning, maintain replacement fertility, ensure appropriate gender balance, improve the quality of the population

• Intensify social mobilization in the health sector and in population and family planning.

#### 3. Primary tasks of the health sector in the coming period

*The overall objective* is to continue developing Vietnam's health sector towards the goals of equity, efficiency and development; improve quality of health services, meeting the growing and diverse needs of the people for protection, care and promotion of health; reduce morbidity, disability and mortality, increase life expectancy, improve quality of the population to contribute to improving quality of human resources, to meet the needs of industrialization, modernization, building and protecting the nation, contributing positively to socio-economic development of the country.

The primary tasks of Vietnam's health sector for the period 2011–2016 have been declared by the Minister of Health to include:

- Reduce overcrowding of central, municipal and some specialized hospitals through developing coherent solutions with a clear roadmap.
- Reform the health financing mechanism for the public sector.
- Implement the roadmap towards universal health insurance.
- Strengthen the grassroots health network in order to reduce overcrowding at higher levels of the system and to ensure equity in health care for the people.
- Strengthen development of human resources for health: step by step ensure that basic demand is met for human resources at all levels, ensure that commune health stations have medical doctors to serve them, develop policies for health workers including policies to protect their rights and protect them from occupational risks.
- Implement on a pilot basis health care service provision in tertiary hospitals that meets the higher demand for "hotel services" of those who can afford to pay.
- Improve effectiveness of behavior change information, communication, and education on health care.

# 4. Consulting and implementing orientations of international organizations

In the process of reform and improving the health sector, Vietnam will continue to implement international commitments, and at the same attaches great importance to consulting and applying experience of other countries, especially the many lessons and experiences that have been reviewed and recommended by the United Nations, World Health Organization and other international organizations.

In the next few years, Vietnam will need to consult and apply recommendations of the World Health Organization regarding the health sector in general, as well as options for approaches and solutions regarding important issues of the health system, such as health service delivery, population and reproductive health, health information systems, health human resources, pharmaceuticals and medical technologies..., first of all following the recommendations for the following orientations:

#### 4.1 Achieve the Millennium Development Goals (MDG)

Vietnam will continue to work towards achieving the Millennium Development Goals set out by the United Nations, including health related goals of: a) reducing child mortality

(MDG 4): Reduce by two-thirds the under 5 mortality rate in the period 1990–2015; b) Improve maternal health (MDG 5): Reduce by three-fourths maternal mortality rate in the period 1990–2015 and by 2015 ensure universal access to reproductive health care; c) control HIV/AIDS, malaria and other communicable diseases (MDG 6): halt and begin to reduce the spread of HIV/AIDS by 2015, halt and begin to reduce malaria incidence as well as other communicable diseases by 2015; d) clean water and sanitation (MDG7): reduce by half the proportion of people with sustainable access to safe drinking water and basic sanitation.

#### 4.2. Health system framework

Vietnam is and will continue to apply the health systems framework with 6 building blocks (recommended by the World Health Organization [1]) in developing 5-year plans, monitoring and evaluating implementation in order to ensure comprehensiveness and consider fully the complex relationships of the component parts of the health system, appropriate with Vietnam's special characteristics.

#### 4.3. Reform in concepts and approaches to primary health care

In the 2008 World Health Report [18], the World Health Organization put forth four contents of reforms in primary health care:

- *Reforms for universal health care* aimed at improving equity in health care: are reforms in the health system oriented towards a universal access, expressed through ensuring availability of health services, removing barriers to health care service access among the people, and implementing social protection in health.
- *Reforming health service delivery towards greater people-centered care*: are reforms and reorganization of health service delivery including health services oriented towards the needs and expectations of the people (rather than oriented towards the providers of health care services). Reorganization of the primary health care network nearer to the people and meeting the health care needs of different population groups.
- *Reforms in public policies* aimed at communicating and protecting health in the community through integrating public health activities with primary care and aimed at health oriented intersectoral public policies.
- *Reforming leadership:* Replacing the bureaucratic, top-down form of leadership or the form of entrusting everything to the private enterprise sector with a more comprehensive, democratic (community based) leadership with negotiation between stakeholders.

# 4.4. Mobilize and use effectively financial resources to implement "universal coverage"

In the World Health Report 2010 [19], the World Health Organization raised the issue of "universal health care coverage", with recommendations to all nations to:

- Improve effectiveness of mobilizing financing; prioritize state budget resources for health.
- Eliminating financial risks, reducing dependence on direct out-of-pocket payments by households; recommending pre-payment mechanisms (compulsory health insurance); expanding service coverage.
- Use resources effectively, reduce waste, improve hospital efficiency.

# 4.5 Recommendations of the World Health Organization on developing health manpower in rural and disadvantaged areas

In their global policy recommendations report [20], the World Health Organization proposed four main policy measures to attract, recruit and retain health human resources in rural areas:

- Education recommendations included 5 measures: (i) Targeted admissions to enroll students from rural areas; (ii) Locate medical training schools outside of major cities; (iii) Send students for clinical rotations in rural areas; (iv) Revise training curricula to include rural health topics; (v) Design continuing education and professional development programmers that meet needs of rural health workers.
- Regulatory recommendations include 4 measures: (i) Enhance scopes of practice in rural or remote areas to increase job satisfaction; (ii) Introduce different types of health workers for rural practice; (iii) Ensure compulsory service requirements in rural and remote areas; (iv) Provide education subsidies with enforceable agreements of return of service in rural areas.
- Financial incentive measures: Use a combination of fiscally sustainable financial incentives, such as hardship allowances, grants for housing, free transportation, etc.
- Personal and professional support recommendations included 6 measures: (i) Improve living conditions for health workers and their families; (ii) Provide a good and safe working environment including supportive supervision and mentoring; (iii) Implement appropriate outreach activities to facilitate cooperation between health workers from higher level to support lower levels; (iv) Develop and support career development programs; (v) Support development of professional networks and associations; (vi) Adopt public recognition measures to life the profile of working in rural areas.

#### 4.6 Other important frameworks to apply in the health sector

- National drug policy requires making explicit the objectives of the pharmaceutical sector and applying best practice to achieve them [21].
- The Health Metrics Network developed a useful framework for strengthening national health management information systems [22] that builds on existing national information systems and gradually moves them towards a vision of information that serves national information needs.
- To enhance the contribution of medical devices to meeting national goals, the First Global Forum was held in 2010 [23] and issued a framework of recommendations for action covering 5 groups of issues: a) role of medical devices to improve health service delivery; b) safe, accessible and affordable medical devices; c) health technology assessment; d) health technology management; e) health technology regulation.

### **Chapter 3: Health Human Resources**

#### 1. Update on major policies

In 2010, new policies affecting health human resource development include:

The Eleventh Party Congress set out the goal that by the year 2020, there will be 9 doctors per 10 000 people, a fully worked out organizational model and consolidated grassroots health care network, strengthened training and improved professional quality, ethics and sense of responsibility among health workers.

The Law on Examination and Treatment came into effect in 2011, stipulating that professionals practicing medicine (examination and treatment) must have a medical practice license and continuously update their medical knowledge.

The Ministry of Health determined that the main goal of the Master plan for health human resource development 2011–2020 is developing health manpower of good quality, appropriate structure and distribution [24].

The 5-year Plan for the health sector 2011–2015 has been approved by the Ministry of Health, setting the goal that by 2015, 80% of communes should have a doctor; over 95% of communes should have a midwife or obstetrics-pediatrics assistant doctor, and strive to achieve the goal of 90% of villages having an active village health worker [25]. New regulations were issued on the functions and tasks of the village health workers [26], helping village health workers to understand more clearly their responsibilities and rights and administrative agencies to better organize the village health worker network.

At the beginning of 2011, some documents to manage organization and manpower of the health sector were issued such as guidance on the staffing of Population and Family Planning Centers [27], and on professional standards, functions, tasks of some health sector staff for which salary levels have not yet been issued [28; 29].

Several documents related to recruitment, use and remuneration of health workers continues to be amended, completed such as: Circular guiding implementation of Decree 64/2009/ND-CP, dated 30 July 2009 on the policy related to health officials and health workers working in socio-economically disadvantaged regions [30]. The government has issued Decree No. 56/2011/ND-CP dated 4 July 2011 stipulating the salary supplement for government health workers and officials in state health facilities, in which the supplement ranges from 20% to 70% of basic salary at the step for which the individual is currently receiving the responsibility and seniority supplements (if any), and depends on the type of work being performed.

#### 2. Status of implementing assigned tasks

#### **2.1. Achievements**

#### Number and quality of health and pharmaceutical manpower has been improved

The number of health workers continues the upward trend of the past decade. The number of doctors and assistant doctors per 10 000 people is increasing (12.52 in 2009 up from 12.23 in 2008), the number of doctors per 10 000 people increased 0.07 (from 6.52 to 6.59) and the number of nurses per 10 000 has also increased (8.82 in 2009 compared to 7.78 in 2008). Statistics on university trained pharmacists in 2009 excluded those working in production and distribution of pharmaceuticals so the number per 10 000 people was only

0.38 (if manufacturing and distribution sectors are included, the ratio is 1.78 in 2009 and 1.22 in 2008) [31].

The proportion of health workers with university or post-graduate education has remained almost constant. In 2008, the figure was 27% while in 2009 this figure was 26% when excluding university-trained pharmacists working in the production and distribution sectors, and about 28% if this group was also included (as in 2008).

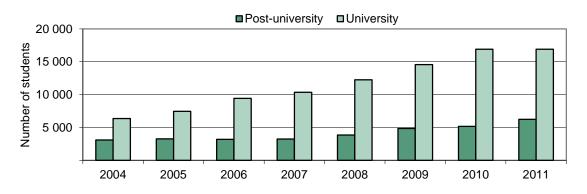
The proportion of communes with a doctor increased to 67.7%, compared to 65% in 2008. The number of communes meeting national benchmarks reached 65.4%. The proportion of commune health stations with an obstetrics-pediatrics assistant doctor or midwife reached 95.7%, exceeding the goal set out in the plan. The proportion of villages with village health workers in communes or district capitals reached 97% [31].

## Recruitment of students into university and post-university education increased strongly

The health human resources training network includes 25 universities/university departments, 34 medical junior colleges, 42 medical pharmaceutical technical secondary schools. In addition there are 6 research institutes, 7 hospitals that participate in training new the university or secondary levels. medical personnel at The 25 medical universities/departments includes private schools and multi-sectoral training establishments. Up till now, the private medical schools only participate in training university-level nurses and bachelor's in public health with a limited number of students. In fact, in some of these schools the number of university students is declining and the schools are focusing on secondary level nursing and pharmaceutical training. In 2010, the Nghe An Medical Junior College was formally upgraded to Vinh Medical University with its main responsibility to train health workers for the central region.

Medical schools in the past year have increased the number of formal students recruited, and implemented special training modalities, continuing to implement accreditation of training and education reform.

The number of university and post-graduate students recruited has increased strongly (Figure 3). At the university level, the quotas for university training increased from 6360 (2004) to 16 900 (2011). Training of masters, PhD, residents, specialist I and II doctors has also increased. The post-university training quotas for 2004 were 3098 students, increasing to 5170 in 2010 and by 2011 it had increased to 6248 [32].





The total number of university students in medical fields who graduated in 2010 was 7897. With basic health personnel consisting of doctors, university-trained pharmacists and

nurses, the number of graduates each year has increased rapidly. In 2008, there were 2365 medical, 817 pharmaceutical and 790 nurses graduating from university programs. In 2010, there were 4069 medical, 1583 pharmaceutical and 1710 nursing graduates at the university level, almost double the figure in 2008. These figures indicate the supply of medical personnel has improved considerably. The number of graduates has also increased for other forms of training such as medical technology, preventive medicine doctor,..., but the absolute increase is not substantial.

# Modalities of health worker training for disadvantaged regions continues to be implemented

In order to implement the policy of training to meet society's needs, from 2008 the Ministry of Health has established the Steering Committee on training of health human resources to meet society's needs and implemented training of staff with signed commitments to work in specific facilities. In 2008, 10 universities recruited 1755 students (medical, pharmaceutical, and other university level staff) and achieved 57.8% of the requested number to serve 47 localities/units; in 2009, 13 universities recruited 2305 students, achieving over 71.1% compared to requirements for 38 localities and units; in 2010, 13 continue to recruit 3617 students, achieving 98.4% compared to requirements of these disadvantaged localities [33].

The project to train health workers to serve in disadvantaged and mountainous areas of provinces in the North, Central Coast, Mekong Delta and Central Highlands following the direct recruitment mechanism without entrance exams is being implemented from 2007–2018. In the 3 years from 2007 to 2009, has recruited 1488 medical students and 306 pharmaceutical students, most of whom are ethnic minority people [34]. The health workers who were trained have returned to their localities to work, contributing to strengthening health manpower in disadvantaged regions.

#### Initial steps of education quality accreditation have been implemented

By the end of 2010, all medical universities, junior colleges and technical secondary schools are implementing accreditation according to the criteria of the Ministry of Education and Training, and almost all schools are in the concluding phase of internal self-appraisal and are waiting for external verification.

Reforms in medical education have begun to be implemented at all training facilities Ha Noi Medical University has registered to implement the advanced training program for university degree in nursing and this has been approved by the Ministry of Education and Training; The Ha Noi School of Public Health is improving its undergraduate and master's level public health training curriculum applying new approaches to medical education;<sup>4</sup> eight medical universities/departments have implemented pre-clinical skill training;<sup>5</sup> eleven junior colleges and medical secondary schools have received support to improve teaching capacity, including clinical practice and pre-clinical instruction for instructors.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> Project for strengthening capacity for public health training at the Hanoi School of Public Health, part of the Program to improve health human resources capacity for the period 2006–2010 and funded by the Netherlands Government.

<sup>&</sup>lt;sup>5</sup> Project on pre-clinical skills training of Netherlands Organization for International Cooperation in International Education (NUFFIC), funded by the Royal Netherlands Government (2007–2009).

<sup>&</sup>lt;sup>6</sup> Project for strengthening teaching capacity in medical junior colleges, technical secondary schools as part of the Program to improve health human resources capacity for the period 2006–2010 funded by the Netherlands Government.

#### Regular supplementation and upgrading of health human resources capacity

The retraining program relying on state budget resources for government officials and workers in facilities directly managed by the Ministry of Health has maintained regular implementation. Similar to previous years, the training contents has focused on areas of :political reasoning, state administrative management, professional skills. The training plan was developed primarily based on requests from various units. The form of training is primarily concentrated short-term training courses.

Almost all investment projects in the health system in all regions, include a component on retraining, continuing medical education of health workers such as:

- Project to upgrade district hospitals 2006–2009 [35] has organized training of 3378 district level health workers in 11 specialties (intensive care, anesthesia, imaging, endoscopy-electrocardiogram, nursing, obstetrics, surgery, pediatrics, biochemistry testing, hematology testing, microbiology testing).
- The project investing in building, renovating, upgrading and hospitals specialized in tuberculosis, mental illness, oncology, pediatrics and some provincial general hospitals in mountainous and disadvantaged areas using government bonds and other legal sources of funding for 2009–2013 (Prime Ministerial Decision No. 930/QD-TTg dated 30 June 2009). Training component of the project is being implemented in hospitals as assigned by the Ministry of Health.

One form of professional training in the health sector is that of Project 1816 [36]. After more than 2 years of implementation 2504 technical skills belonging to 26 specialties have been transferred to provincial level; 702 technical skills have been transferred to the district level, 12 066 district health workers have participated in training; 1815 commune health stations have received technical assistance from district hospitals [37]. As a result, the overcrowding of higher level hospitals has become less severe.

Medical universities and large hospitals frequently organize short-term specialist training courses, on advanced technologies depending on the need of trainees and medical facilities. Study tours, short-term training overseas using domestic funds and international assistance are also implemented, but are limited in number.

# Programs, projects using external assistance and loan funds for development of health human resources have been implemented

Health human resources sector development program/project funded by ADB with grant funds from AusAID. Implementation from 2010 - 2015 with total funding of 76 323 000 USD. The Main objective of the program is to upgrade medical worker training facilities, support planning and management in training, strengthen human resources management, and improve the financial and provider payment mechanisms for health services.

The Program to improve health human resources capacity for the period 2006–2010 (expected to end in 2012) funded by the Netherlands Government in the amount of 14 million Euros with the objective of improving teaching capacity for training facilities, improving training curricula, developing a workforce of experts able to provide advice and teaching, support improvements in training management.

Regional health support projects in the Mekong River Delta, the Northern Mountains, the Central Highlands, South Central Coast, North Central Coast, the GAVI project, Global Fund project, etc., all include training support for health workers from village health workers

to central level health workers, including long-term training (PhD, Master's, MD, pharmacist, specialist 1 and 2, ...) and short-term training on professional skills or management.

Some other projects in medical schools funded by Pathfinder International, Swedish Sida, Atlantic Philanthropies, UNFPA, WHO, support specific activities such as improving detailed training curricula for some subjects, developing training materials, strengthening research capacity, active teaching methods,...

Currently the Ministry of Health is guiding schools to prepare proposals to reform health worker training in order to achieve the goal of improving quality of training and providing a health workforce that has better competencies.

#### 2.2. Difficulties and shortcomings

#### Some indicators of health human resources remain low compared to goals

In comparison with the 5-year Health sector plan for 2011–2015, some indicators on health human resources remain lower that estimates for 2010 and may be difficult to achieve without major changes in health human resources policies. Data for 2009 indicate the number of doctors per 10 000 people reached 6.59 (the goal for 2010 was 7), somewhat lower than the levels reached in neighboring countries like China and the Philippines [38]. The number of university trained pharmacists per 10 000 people remains very low (0.38) compared to the goal of 1.2, even, as was described above, this number is an undercount because it doesn't 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) [24] indicating that there has not yet been any substantial change in the number of nurses working in the state health sector (Figure 4).

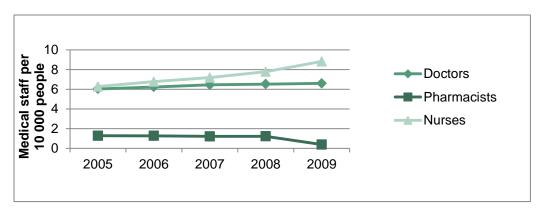


Figure 4: Doctors, pharmacists and nurses per 10 000 people, 2005–2009

#### Inappropriate manpower distribution across regions and fields of practice

The Mekong River Delta and the Central Highlands are still 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 [31]. 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, 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 has even fallen 11% (Table 2).

			Growth				Growth
	2004	2009	rate		2004	2009	rate
Ha Giang				Yen Bai			
Province	542	849	57%	Province	629	979	56%
District	702	1485	112%	District	944	1054	12%
Commune	995	886	-11%	Commune	956	957	0%
Cao Bang				Hai Phong			
Province	557	692	24%	Province	2645	3071	16%
District	803	1146	43%	District	1742	2180	25%
Commune	806	834	3%	Commune	1028	1249	21%
Nationally							
Province	76 777	105 168	37%				
District	62 183	81 233	31%				
Commune	49 358	61 149	24%				

## Table 2: Change in health human resources by level of facility, nationally and in selected provinces and cities, 2004~2009

Source: Health Statistics Yearbook 2004, 2009. Health Statistics Division, Planning and finance Department, Ministry of Health

There are many factors affecting distribution of health manpower. Low incomes, difficult working conditions, few opportunities for professional development, etc. are some important reasons leading to shortage and inappropriate distribution of health workers and shifts in human resources between geographic areas and technical fields of work. In rural, mountainous areas and in fields like preventive medicine, tuberculosis, leprosy, mental illness, etc., even though there are special salary supplements, the amounts are still limited and compared to health workers in hospitals, incomes remain much lower (because hospital staff have considerable additional income from revenues related to implementing hospital autonomy and from after-hours practice). Some grassroots level and preventive medicine facilities that have been assessed as operating effectively are usually the places that have organized themselves successfully to provide additional services to increase incomes of their staff [39; 40; 41]. It is important to consider how collecting user fees for some services will affect implementation of other tasks of the health service unit, and the general effectiveness of the health system and benefits received by the people.

Regarding pharmaceutical manpower, according to a report compiled from 63 provincial health bureaus in 2010, the total number of university-trained pharmacists working in the public sector is 13 741, while need in 2010 was 22 653 [42]. Currently there are 7 university-level pharmacist training establishments, including Hanoi Pharmaceutical University, Ho Chi Minh City Medical-Pharmaceutical University, Can Tho Medical and Pharmaceutical University, Thai Nguyen Medical University, Hai Phong Medical University, Military Medical University, Hong Bang International University. Annual the number of pharmacists graduating is about 1200 people [43]. In addition, according to data of the Science and Training Department of the Ministry of Health, the quota for training secondary level pharmacists in 2010 in public training facilities was 14 080 and in non-public training facilities was 10 835. The number of pharmacists trained is quite high, but remuneration for pharmacists in state health facilities is not attractive, and the result is that many pharmacists, after graduating (from university of secondary professional schools) do not work in health facilities, but work as representatives of domestic and foreign pharmaceutical companies. This situation has led to a shortage of pharmaceutical staff in the state health system.

## Human resource management and health worker remuneration policy face many limitations

Even though the training quotas of medical and pharmaceutical schools have increased substantially, and some special training modalities have been implemented, the number of health workers in state health facilities has not increased proportionally, the distribution of health human resources between socio-economic regions remains inappropriate. One can see that solutions relying simply on training and supplying health human resources are inadequate to resolve the human resource shortages, and need to be combined with solutions on recruitment, deployment of human resources as well as organizational mechanisms.

There is no evidence indicating improvements in recruitment of health human resources. According to the 2009 Health Statistics Yearbook, the number of doctors in the public sector increased 453 people compared to 2008, while the number of medical students (general practitioner, traditional medicine, and dentists) graduating in 2008 was 3520 and in 2009 it was 3550 [44]. Besides the main reasons related to income, working conditions, and opportunities for professional development, the situation is complicated by regulations allowing for autonomy of state health service units [45]. While this has facilitated overcoming financial difficulties of these units and improved incomes of staff, yet the policy has led to health care facilities limiting recruitment in order to save on costs.

Deployment and remuneration of health workers are still fraught with many problems, in particular health worker income remains too low as mentioned above, and is the main reason for the workforce shortage in regions and fields in which health workers do not have opportunities to provide additional services/work after hours. For large health facilities, in economically developed regions, health workers often do have supplementary jobs in private health facilities. This phenomenon often takes place in developing countries [46], thus requires study to resolve gradually.

Shifts and changes in workplace of health workers in Vietnam remain relatively low. 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 [40]. This contributes to ensuring stability in health manpower in rural areas, disadvantaged 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 is 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 [47]. Changes in the provincial and district health systems according to Joint Circular No. 03/2008/TTLT-BYT-BNV, dated 25 April 2008, has also created the situation in which many health workers, mainly doctors, are moving from commune health stations to higher level facilities.

The health worker organization and management system has many shortcomings. The health sector is considering current organizational models to learn from the experience and make improvements, for example such as the role of the regional polyclinic, the position of village health workers, and hospital organization. Private health human resource management remains unsystematic. The Ministry of Health is still unable to manage human resources working in the private sector.

Refresher training, capacity strengthening of health workers also faces difficulties in terms of sources of funds and organization of implementation. In health support projects,

training components usually are quite small, and are not given priority in implementation. Many health workers do not like to participate in professional training courses because the support funding is too low, affecting their supplementary incomes [48]. Commune health workers are seldom retrained 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 [47]. Forms of refresher training, strengthening capacity are not yet diverse, and still primarily consist of short-term concentrated classes.

Even though the health sector has issued regulations on the functions, tasks of health workers, but there are still no skill and competency standards required for each type of health worker to act as standards for training outputs.

The Law on Examination and Treatment regulates that people who practice medicine (examination and treatment) are required to update their medical knowledge on a regular basis, yet has not yet set out clear regulations on the forms of 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 [41].

#### Training of new health human resources still faces many shortcomings

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%, and in some cases as much as 26% per year [49], yet physical facilities, the instructor workforce in these schools has not developed proportionally. The number of clinical practice facilities has remained almost the same, leading to the situation that medical students have few opportunities for hospital practice and the quality of training has fallen. As for junior college training, almost all medical junior colleges have only recently been upgraded from medical secondary schools in the past few years, yet provinces have not provided adequate investments, affecting negatively the quality of training.

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 [50]. 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.

The next problem with the training system for health workers is management of schools is not unified. Some schools are managed by the Ministry of Health, some by the Ministry of Education and Training, some by the Ministry of Defense, while others are managed by the Provincial People's Committee. 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 the issue of clinical practice training quality requires special consideration.

Medical education reforms in medical schools has been and continues to be implemented, yet remains limited to a few schools, primarily those at the university level, and results of implementation have also not yet been evaluated. The training program, instruction methods have not yet been updated with new trends in medical education [51], there is a shortage of training materials and documents, the instructors and trainers are insufficient in number and have not received regular training, physical facilities are deficient, funds reserved for training activities are low and continue to be problems that need to be overcome.

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 [52].

### **Chapter 4: Health Financing**

#### 1. Update on major policies

Overall, since 2010, the health care financing orientation has remained stable, with no major changes. The steering perspective, endorsed in the Eleventh Party Congress Resolution, remains to "Increase state investments while promoting social mobilization for health care activities" [17]. Achievement of universal health insurance coverage has been set as a strategic goal for the 2011–2020 period. Along with emphasis on the perspective "The State continues increasing investments and promoting social mobilization", Party documents also indicate a transformation of the operational and financing mechanisms, of state health facilities towards autonomy, transparency and openness.

In terms of specific policies, some legal documents have been issued related to the health budget. Concretely these include issuing new cost norms in the budget allocation for health both in development investment and recurrent expenditures. Decision No.60/2010/QD-TTg issued principles, criteria and cost norms for allocations of development investment capital from the state budget for application during the period 2011–2015. According to this decision, the state budget will invest in health through approved national target programs, and supporting investments for specialist hospitals and provincial and district health facilities. The investment support prioritizes mountainous areas of the North and Central Highlands [53]. Decision No. 59/2010/QD-TTg, dated 30 September 2010, issues allocation norms for recurrent spending budgets from the state budget applicable for 2011. Compared to the older norms according to Decision No.151/2006/QD-TTg, the new cost norm is 1.8 times higher in urban and delta areas, and 1.85 times higher in the mountainous and island areas [54]. The policy on income supplements, motivation subsidies for health workers and officials in regions with especially difficult socio-economic conditions according to Decree No.64/2009/ND-CP is further guided by Joint Circular No.06/2010/TTLT-BYT-BNV-BTC, dated 22 March 2010. According to that policy, the salary supplement to attract health workers to these areas is 70% of the salary, in addition there are other subsidy regimes such as subsidies for staff development, upgrading professional skills, travel costs, etc.

Regarding health insurance, according to Decree No.62/2009/ND-CP guiding implementation of the Law on Health Insurance, starting from 1 January 2010, the insurance premium increased from 3% to 4.5% of salary, wage, pension, stipend or minimum salary; however for students and dependents of workers the premiums are 3% of the minimum wage. The state budget will subsidize at least 50% of the premium for near poor families, and a minimum of 30% of the premium for school students and farming households with average living standards. With a total nearly 25 million people whose insurance is fully subsidized by the state budget (accounting for 48.6% of all insured) and 10.5 million people for whom 30% of the premium is subsidized from the state budget, the increase in insurance premium has substantially increased the state budget directly supporting users. As calculated, total state budget allocated to subsidize health insurance in 2010 is 2.2 times higher than in 2009. Documents guiding implementation of the Law on Health Insurance are being completed for submission to authorities for approval. On 17 October 2011 the Government issued Decree No. 92/2011/ND-CP regulating penalties for administrative violations in health insurance, according to which violations, depending on severity, will be punished with warnings or fines, with the highest fines reaching 40 million VND. The Joint Circular of the Ministry of Health and Ministry of Finance guiding procedures for health insurance claims for people with health insurance who suffered from traffic accidents has also been issued (Joint Circular No. 39/2011/TTLT-BYT-BTC, on 11 November 2011).

Some important health policies are being drafted such as the Decree on reforming the operational and financing mechanisms for state health facilities, the draft circular revising Circular No. 14 on adjusting prices of some health services, the draft circular guiding implementation of Decree 69 on social mobilization in the health sector.

Early in 2011, the Ministry of Health issued the Plan for the protection, care and improvement of people's health during the 2011–2015 period. This plan marks an important change in health care planning work as this was the first time, ever, it adopted the conceptual framework of the World Health Organization and results from the Joint Annual Health Review (JAHR) in the plan development process. The five-year plan set out objectives for health financing: "Reform the operational and financing mechanism in the health sector towards a rapid increase in the public spending for health, development of universal health insurance, adjustment and use of health financing to strengthen efficiency".

#### 2. Status of implementing assigned tasks

#### 2.1. Achievements

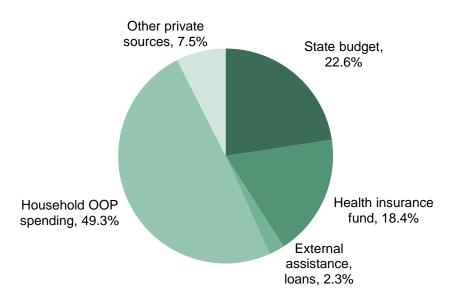
Vietnam's total social expenditure for health as a share of GDP has shown a gradual increase over recent years, from 5.2% in 2000 to 6.4% in 2009 [55]. The health share of GDP in the group of lower middle income countries averages 4.3%. Thus, one could say that the share of GDP Vietnam spends on health is rather high compared to other countries with similar income levels, and is even higher than many countries with higher income levels like Thailand (3.7%), Singapore 3.1% and Malaysia (4.4%) [56]. Health expenditure per capita has also increased rapidly, from 21 USD in 2000 to 76 USD 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% in 2005 to 36.6% in 2006 and reaching 43.3% in 2009 (Figure 5). Securing budget for free health insurance for the poor, ethnic minority groups, children under age six and other social target groups, and mobilization of the government bonds to implement projects upgrading health care facilities and the health care network (Prime Ministerial Decisions 225, 47, 930) has raised state budget spending on health. During the 2008–2010 period, the rate of growth of state budget spending on health was 25.8%, higher than the rate of growth of overall state budget spending (16.7%), 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 state budget spent on health (not including funds from health insurance or external assistance) has increased from 3.9% in 2000 to 8.2% in 2009. This result, however, is lower than the recommendation in JAHR 2010 (10% 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 see a declining trend, so the level of increase of state budget for health does require more attention.

In the roadmap towards universal health insurance, *the health insurance coverage rate has been rising over time*, reaching 60% of population in 2010. Expanding 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% in 2006 to 18.4% in 2009. The group fully

subsidized through the state budget (including the poor and children under age 6) account for 42.7% of all people with health insurance [57].

International assistance funds continue to rise and retain a fixed share in the total investment budget. In 2010, total ODA supplied about 3500 billion VND in capital, equivalent to about 8% of the state budget spending on health. The disbursement rate for external assistance has improved with an overall disbursement rate in 2010 of 72% [58]. The Ministry of Health 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 [59]. Even though the number of loan projects is not large, total funds from this source account for 58.5% of total ODA. Besides ODA, the health sector also receives international support from INGOs, with 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.



#### Figure 5: Health financing structure, 2009

Although expenditures from the state budget accounts for only 23% 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% [56]. 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, that 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 Ministry of Health has focused greater attention to monitoring, evaluation and review of Decree No.43/2006 implementation in order to ensure transparency and openness in the autonomy process in state health facilities. After reviewing and evaluating the situation in 18 public hospitals, the Ministry of Health issued an official letter 3295/BYT-KH-TC, dated 26 May 2010, to all provincial health departments and hospitals directly managed by the Ministry of Health requesting them to undertake actions 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 according to Decree No.43/2006/ND-CP in medical facilities. In order to strengthen effectiveness in use of state budget for procurement and public spending, the Ministry of Health is drafting a circular to guide procurement in health care to replace Circular 10/2007, which has been shown to have many points that are no longer appropriate.

Regarding goals of health care cost containment and gradual reduction in the out-ofpocket spending share of total health care expenditures, statistics from the National Health Accounts show that the out-of-pocket payment share dropped from 65% in 2005 to 49.3% in 2009. Reforming the hospital payment mechanisms considered to be a basic measure to control health care costs. The Ministry of Health 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 package payment by disease group continues as components in some projects, with regularly reporting to the Steering Committee for hospital payment reforms. For the poor and ethnic minority people in remote and isolated areas, indirect costs are real barriers to their access to free health care services at public facilities [60]. For this reason, some health support projects are supporting 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 Ministry of Health is submitting to the Prime Minister for approval 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 and related to payments for health services. The Ministry of Health has finished drafting a Circular to revise Circular No.14 on price adjustment of some health care services (350 services) and has submitted it to the Government for approval.

#### 2.2. Difficulties and shortcomings

The objective of striving to maintain the state budget expenditure on health at 10% of total state budget may face impediments at the present time because of macro-economic difficulties, leading to the need to tighten fiscal policy, reduce public investment, reduce budget deficits [61]. At the same time, in a context in which medical technology is developing very rapidly, the demand for medical services among the people is ever increasing in terms of quality and quantity, medical costs are escalating, the increase in state budget spending cannot satisfy all basic spending requirements, including expenditures on human resources. The goal to strive for public health spending to reach over 50% of total social health spending is a major challenge in the context of cutting government bonds and public spending cuts by the Government.

The responsibility to achieve universal health insurance faces many impediments and challenges such as: the role and responsibility of local authorities in implementation of the roadmap towards universal health insurance coverage are not clearly indicated in regulations; compliance with payment of insurance premiums in the formal sector is low, especially in the private enterprise sector; difficulties inhibit increasing health insurance coverage in the informal sector; benefits are below expectations of people with health insurance; and performance of insurance administration is below requirements.

In relation to priority state budget allocation for preventive medicine and the grassroots health network, recurrent budget for commune health station and stipends for village health workers are too low and insufficient to maintain regular and effective performance. This is truly a great barrier to preventive work. Therefore, adjustments are needed to make cost norms and the funding mechanisms for recurrent activities of the commune health station and village health worker network more appropriate.

The task of reforming the state budget allocation mechanism for health facilities towards performance-related pay has not yet been implemented in a consistent manner to achieve clear results. There remain many limitations to efficient use of health financing resources such as poor implementation of the referral system, ineffective control of abuses of pharmaceuticals, diagnostic tests, lack of information on cost-effectiveness of medical interventions, incomplete assessment of corruption in the health sector. In order to implement the basic goals of health financing to ensure adequate funds for health care, besides efforts to mobilize additional financial resources for health, effective use of existing financial resources requires special attention.

In operational reforms of health care facilities, especially reforms of health financing, aimed at achieving autonomy, openness, and transparency, the following impediments are present: no regulatory impact assessment undertaken for the draft Decree for operational and financing reforms in state health facilities; some socio-economic environment and other non-health factors are not suitable for autonomy such as a mechanism to control conflicts of interest, lack of instruments to control costs by VSS; poor monitoring and regulation of autonomous activities due to shortage of human resource and supporting instruments [62].

There is a lack of a comprehensive plan and coordinated efforts among stakeholders to implement hospital payment reform. Issuance of a new fee schedule based on correct and full cost accounting for input costs is facing difficulties, such as: lack of consensus on changing the service fee schedule, lack of transparent and standardized hospital costing to serve as a basis to propose a new service fee schedule.

Health care cost containment and reduction in out-of-pocket payments from households have not met expectations. Household out-of-pocket remains at nearly 50% of total health care costs, which is higher than the level recommended by the World Health Organization (30%). There is a high prevalence of households facing catastrophic healthcare costs (12%), which has not declined over time. Control of costs for unnecessary medical care services related to overprescribing pharmaceuticals and services has been complicated by the lack of standard treatment guidelines. In addition, selection of medicines and services included in the insurance list is not yet based on evidence of cost-effectiveness.

#### 2.3. Implementation of foreign-funded projects/programs

#### Achievements

Health financing is attracting more attention and interest of donors and international health partners. Almost all health system support projects have a core component on health financing or health insurance, mainly focusing on the following areas:

#### Support implementation of universal health insurance

- Transforming health system project funded by Rockefeller Foundation implemented a feasibility study on implementation of universal health insurance and health insurance for the near poor with support of 70 000 VND, in 2010–2011.
- Project on Improving effectiveness and sustainability of the health insurance fund funded by the World Bank with support of 211 060 USD over three years 2011–2013.

#### Support health insurance for the near poor

- The Mekong Regional Health Support Project funded by the World Bank and cofunded by the Japanese Government, was implemented over 6 years (2006–2011). Component A focused on supporting the poor and near poor through partial subsidies of their insurance premiums. The project supported 30% of the insurance premium to increase participation of the near poor in the health insurance scheme. Thus, combined with a government subsidy at 50% of the premium, the near poor only had to pay 20% of the premium.
- Health Support for the North Central Coast Region: funded by the World Bank at 75 million USD during 2010–2016. One of the objectives was to develop and effectively implement the health insurance scheme for the near poor.

#### Support indirect costs and high health care costs for beneficiaries of Decision 139

- Healthcare in the Central Highlands project from ADB was implemented in 5 Central Highlands provinces from 2004–2009. One of major outputs of the Project was to comprehensive and effective support of the healthcare fund for the poor. To this end, the project implemented four major activities (within Sub-component C2) for the poor and ethnic minority people in five Central Highlands provinces, including: (i) support meals, (ii) support travel, (iii) support direct medical services costs and (iv) support health examination in the community. Total support costs amounted to 5 579 000 USD using the non-refundable funding from Swedish Sida.
- Northern Upland Project funded by the World Bank in the amount of 66 million USD during 2008–2014. Component II, included support for indirect costs and relief of the burden of accessing health care services among the poor and ethnic minorities in the northern mountains provinces.
- Health Care Support to the Poor of the Northern Uplands and Central Highlands (HEMA): funded by the European Commission with 19.4 million USD during 2005– 2012. One of the project components was to support food, travel costs for poor patients and expenses beyond the insured ceiling, co-payment of 5%.
- Health Care in the South Central Coast Region: funded by the ADB with a total of 46.7 million USD during 2009–2014. One of the project objectives was to improve access to and use of health care services for the people, especially the poor, ethnic minorities, women and children through subsidizing indirect costs.

#### Pilot of performance-based funding mechanism

- Health Support for the North Central Coast Region using loan funds from the World Bank.
- Health Human Resources Development Program using loan funds from ADB and non-refundable funding from AusAID.

#### Strengthening financial management capacity

• Health Sector Capacity Support Project funded by the European Commission during 2009–2014, in which it has a component for planning and budgeting (including funding source for health) and governance (including management of public finance).

#### **Impediments**, limitations

The most striking difficulty in mobilizing and effectively implementing external assistance projects is the trend towards reduction in official development assistance (ODA) as Vietnam officially became a lower middle income country. At the same time, the world economy is facing great difficulties, making it very difficult to mobilize and request funding sources from international partners.

# Chapter 5: Pharmaceuticals, Medical Equipment and Infrastructure

This chapter will provide an update on pharmaceuticals, biologicals (including vaccines, blood and blood products), medical equipment and infrastructure for the period 2010–2011. Specifically, this chapter provides information on relevant new policies, review of implementation of assigned tasks, including tasks mentioned in the Five-year health sector plan (2011–2015) and recommendations made in the Joint Annual Health Review 2010. On the basis of this review recommendations are made to develop the 2012 annual health sector plan.

#### 1. Updates on major policies

#### 1.1. Pharmaceuticals

New legal documents in the field of pharmaceuticals focus on development of pharmaceutical and biological production industries. Under Prime Ministerial Decision No. 153/2006/QD-TTg dated 30 June 2006 approving the Master plan for Vietnamese health system development to 2010 and a vision to 2020, the pharmaceutical sector will be developed to become a spearhead economic sector. The pharmaceutical industry will be strongly developed, improving capacity in domestic pharmaceutical manufacturing with priority on high-technology packaging. Pharmaceutical ingredient growing regions, pharmaco-chemical material production facilities will be planned and developed. The pharmaceutical distribution and supply network will be consolidated and developed to actively provide a regular and adequate supply of quality drugs at affordable prices and stabilize the market for preventive and curative drugs for the population. Research on and production of vaccines and biologicals will be promoted. The Ministry of Health issued Decision No. 224/QD-BYT in 2011 disseminating the list of foreign-owned enterprises that have been granted permits to operate in the fields of pharmaceuticals and pharmaceutical ingredients in Vietnam and Prime Ministerial Decision No. 842/QD-TTg dated 1 June 2011 approving the "Master plan for developing selected high-tech industries by 2020" including the vaccine and pharmaco-chemical industries. The Ministry of Health also submitted to the Government a Detailed Master Plan for Pharmaceutical Industry Development to the year 2020 with a vision to 2030.

In addition, in 2010, the Ministry of Health issued many legal documents in pharmaceuticals concentrating on drugs quality inspection (Circular No. 04/2010/TT-BYT dated 12 February 2010 guiding drug sampling to verify quality; Circular No. 09/2010/TT-BYT dated 28 April 2010 on drug quality management; Circular No. 08/2010/TT-BYT dated 26 April 2010 guiding data reporting in bio-availability and bio-equivalent research in drug registration; Circular No. 38/2010/TT-BYT dated 7 September 2010 giving instruction to check the compliance to state management regulations for pharmaceuticals and cosmetics). Other relevant documents were issued on specific drugs under especially stringent management (Circular No. 11/2010/TT-BYT guiding practices related to psychotropic drugs and certain pharmaceutical ingredients; Circular No. 10/2010/TT-BYT dated 29 April 2010 guiding practices related to addictive drugs); The Ministry of Health also issued guidelines for cosmetics regulation (Circular No. 06/2011/TT-BYT dated 25 January 2011), international trade in pharmaceuticals and packaging materials in direct contact with pharmaceuticals (Circular No. 47/2010/TT-BYT dated 29 December 2010). The Ministry of Health also developed policies on drug distribution, including Circular No. 43/TT-BYT dated

15 December 2010 regulating the roadmap for implementing the principles and standards of Good Pharmacy Practice (GPP) and regulating the location and scope of work of drug retail outlets. The Ministry of Health submitted to the Government a project to develop the "Master plan for drug circulation and distribution to the year 2020, and a vision to 2030".

With the assistance from the World Health Organization, the Drug Administration of Vietnam collaborated with the Health Strategy and Policy Institute to implement a study on "Assessment of implementation of the national drug policy". It is expected that assessment results will be disseminated by the end of 2011.

The draft Law on Blood Transfusion, currently being developed, will create a legal mechanism for blood donation and transfusion activities. It is expected that the Law on Blood Transfusion will consist of ten chapters built on the principle that responsibility for the protection and care of the people's health is the responsibility of the Ministry of Health, including responsibility for safe, quality, sufficient and timely provision of blood. Blood transfusion activities are considered part of public health, closely related to the epidemiological situation in each community, locality and the nation as a whole. Blood transfusion activities must be run under a "non-profit" principle, without commercializing the blood that has been donated voluntarily. The Law on Blood Transfusion also regulates mandatory licensing for facilities that collect and provide blood products such as production facilities and all biologicals used in blood screening and testing. Responsibility for verification and granting of practice license for blood transfusion centers must comply with the good manufacturing practice (GMP) standards assigned by the Ministry of Health to the Drug Administration of Vietnam for implementation.

#### 1.2. Medical equipment

The National Medical Equipment Policy was approved in 2010. The goal for 2010 is for Vietnam to reach a technical level in medical equipment on par with regional middleincome countries. This includes training technical staff to utilize medical equipment, as well as to service, repair and calibrate it. The policy also calls for development of the domestic medical equipment industry to raise the proportion of equipment that is domestically produced, and eventually to export it [63].

On 10 June, 2010, the Prime Minister issued Decision No. 831/QD-TTg to establish a National Steering Committee for Medical equipment chaired by a Vice Prime Minister, with the Minister of Health as deputy chairman. This legal regulation truly indicates strong state interest in the field of medical equipment. The Prime Minister will issue a national policy for medical equipment for years following 2010.

In 2010, Deputy Prime Minister Nguyen Thien Nhan gave his view at a meeting of the Steering Committee for implementing the National Policy for Medical Equipment (19/2010/TB-VPCP). In the written announcement, he: assigned responsibility for issuing lists of medical equipment in high demand, with potential and conditions for domestic production, in order to focus efforts to research and produce them on a large scale; requested collaboration with the Ministry of Industry and Trade and other relevant ministries to prepare a program on national medical equipment products; required collaboration with the Ministry of Education and Training to strengthen human resource training for medical equipment fields; and suggested coordination with the Ministry of Industry and the Ministry of Finance to work together to find solutions to support research, manufacturing and production facilities (with preferential imports of spare parts for domestic assembly and manufacturing of medical equipment); recommended reviewing regulations to amend, supplement and issue new

legislation on fees for granting of import licenses, fees for calibration, checking and clinical testing of medical equipment to meet actual needs and comply with current regulations.

#### **1.3. Medical Infrastructure**

Decision No. 153/2006/QD-TTg approved the comprehensive Master plan for health system development to 2010 and vision to 2020 and Decision No. 30/2008/QD-TTg approving the health care network that sets the goals for 2010 to reach a minimum ratio of 20.5 beds per 10 000 people (including 2 private sector beds) and goals for 2020 to reach a minimum ratio of 25.0 beds per 10 000 people (with 5 private sector beds). This document reflects the policy for social mobilization of resources with a view to meeting people's growing needs for health care.

In recent years, the Government has paid much attention to medical infrastructures. This development is reflected in two Decisions: (i) Decision No. 47/2008/QD-TTg dated 2 April 2008 approving the project on building, renovating and upgrading district general hospitals and inter-district regional hospitals using government bonds and other legal funding sources for the 2008–2010 period (called Project 47); (ii) Decision No. 930/QD-TTg dated 30 June 2009 approving the Project on "Investments in construction, renovation and upgrading of specialized hospitals in tuberculosis, mental illness, cancers and pediatric care, and some other general hospitals in the mountainous and disadvantaged areas using government bonds and other legal funding sources for 2009–2013 period" (called Project 930).

In addition, other relevant documents have been approved for investments on other units of the health sector. Prime Ministerial Decision No. 154/2006/QD-TTg dated 30 June 2006 approved the Project on "State management on pharmaceutical products, food safety and hygiene, and cosmetic safety for the 2006–2015 period", which constitutes an initial step towards building competent and capable testing centers and laboratories and centers to check quality of food safety and hygiene. Joint circular No. 03/2008/TTLT-BYT-BNV dated 25 April 2008 of the Ministry of Health and Ministry of Home Affairs on strengthening investments, upgrading and consolidating provincial preventive medicine system, and establishment of district preventive medicine centers.

Besides hospitals, the state also invested in commune health stations. The Prime Minister issued Decision No. 950/2007/QD-TTg on investments in commune health stations in disadvantaged regions for the period 2008–2010. The Ministry of Health is requesting that the Government to allow mobilization of funds through government bonds in order to implement this decision over the next few years. In order to improve quality of care of commune health stations, the Minister of Health has signed Decision No. 3447/2011/QD-BYT dated 22/9/2011 issuing the national indicators on commune health 2011–2020 (replacing the national commune health benchmarks).

#### 2. Status of implementing assigned tasks

#### 2.1. Pharmaceuticals and biologicals

#### 2.1.1. Supply

#### Drugs

The pharmaceutical manufacturing and supply system ensures sufficient supply of essential medicines to meet the need for health care of the people. Domestic production of pharmaceuticals has increased, meeting about 50% of drug needs (Table 3). However, the

relative increase in recent years has declined compared to previous years, and the proportion of need met by domestic production has also declined slightly. Therefore the Government has issued many new policies to support domestic manufacturing of pharmaceuticals.

Year	Value of domestically produced drugs (1000 USD)	Percentage increase over previous year	Percent of domestic drug need met
2005	395 157		
2006	475 403	20 %	
2007	600 630	26 %	
2008	725 435	19 %	50.2%
2009	831 205	16 %	49%
2010	919 039	11 %	48%

Table 2. Value of	demonstice all	المعادية والمعالم	during	2005 2040
Table 3: Value of	domestically	y proaucea	arugs,	2005-2010

Source: Drug Administration of Vietnam [42]

#### Vaccines and biomedical products

Domestically produced and imported vaccines and biologicals are granted permits for use in Vietnam by the Ministry of Health and are able to meet the domestic demand for vaccines (Table 4). Vietnam is able to produce all 10 types of vaccines used for the expanded program for immunization: polio, BCG, DPT<sup>7</sup>, hepatitis B, Japanese encephalitis, cholera, typhoid, and measles, and is able to secure sufficient vaccines for scheduled immunization campaigns and provide syringes and needles, and safety boxes for all levels [64]. Vietnam is able to produce almost all essential vaccines, however the requirement to shift to the new five-in-one vaccine (quinvaxem) cannot yet be met by domestic production, and due to the expansion of the target group for measles boosters, the amount of measles vaccine that needs to be imported is about 34% of total demand [64]. Vaccines and biologicals have made important contributions to preventive work and reducing morbidity in Vietnam.

Table 4: Quantity of vaccine and biological permits still in effect, 2010

Contents	Quantity	
Domestically produced vaccines	14	
Imported vaccines	65	
Domestically produced biologics	31	
Imported biologics	264	

Source: National institute for Control of Vaccines and Biologicals

#### Supply of blood and blood components

Voluntary blood donation mobilization is ongoing, in 2010 the proportion of blood donations that were voluntary was over 84% while purchased blood accounted for only 16%. Although voluntary blood donation increased by 27% compared to 2009, blood collection only met 40% of need [65]. The National Institute of Hematology and Blood Transfusion has proposed to increase blood and blood product prices to cover blood production costs. The draft regulation for blood transfusion has been written but not yet issued.

The role of the Vietnam Red Cross Society has not yet been fully exploited; standards for good practice in manufacturing blood and blood components have not yet been issued.

<sup>&</sup>lt;sup>7</sup> BCG=TB immunization vaccine; DPT=diphtheria, whooping cough and tetanus vaccine

The Drug Administration of Vietnam has not yet appraised and granted certificates to facilities meeting conditions to manufacture blood components. There is no inspection system for blood transfusion centers. There are inadequate numbers of officials charged with ensuring quality of blood transfusions.

#### 2.1.2. Quality of drugs and biologicals

According to Decision No. 3886/2004/QD-BYT dated 03 November 2004, by 2010 all drug production facilities must reach the standard for good practice in manufacturing as recommended by the World Health Organization. Decision No. 27/2007/QD-BYT set forth a detailed roadmap with the final deadline of 1 July 2008, all western medicine production facilities must satisfy the standard for good practice in manufacturing as recommended by the World Health Organization and by 01 January 2011 all drug manufacturing facilities producing drugs from medicinal herbs must reach GMP-WHO standards for herbal medicines. However, by 2011 the regulation on standards for production of herbal medicines extended the deadline to 1 January 2014. According to data of the Drug Administration of Vietnam, all domestic pharmaceutical manufacturers of modern medicines met good practice standards by 31 December, 2010 as follows: GMP 101 facilities; GLP 104 facilities; GSP 137 facilities; GDP (distribution): 1407 facilities.

Under Decision No. 11/2007/QD-BYT and Circular No. 43/2010/TT-BYT, by 1 January 2011, all pharmacies and by 1 January 2013 all drug outlets throughout the country must reach good pharmacy practice standard (GPP), only then will their practice certificate be extended. However, as of 31 December 2010, only 4278 retail drug outlets attained GPP standards, accounting for about 42.4% of all retail pharmacies. Among these 72% of retail pharmacies in Ha Noi (1379 pharmacies) and 41.1% of retail pharmacies in Ho Chi Minh City (1535 pharmacies) met these standards, accounting for 58% of all GPP standard pharmacies in the country. A majority of hospital pharmacies have implemented the roadmap for meeting GPP standards. In 4 provinces that piloted GPP (Ha Noi, Ho Chi Minh City, Can Tho and Da Nang), the proportion of hospital pharmacies that met GPP standards reached almost 100%.

The work of ensuring quality of pharmaceuticals and biologicals is not only related to GMP and GPP, but also the implementation of other good practice standards such as: Good storage practices (GSP) (Decision No. 27/2007/QD-BYT dated 19 April 2007); Good laboratory practices (GLP) (Decision No. 1570/2000/QD-BYT dated 22 May 2000); Good distribution practice (GDP) (Decision No, 12/2007/QD-BYT dated 24 January 2007 and Decision No. 29/2007/QD-BYT dated 11 May 2007); Good pharmacy practice in retail pharmacies (Directive No. 1/2008/CT-BYT dated 25 January 2008); Good practice related to production of vaccines and medical biologicals (Decision No. 47/2007/QD-BYT dated 24 December 2007 on initial application of principles and standards of good practice in manufacturing, laboratory, storage, distribution for facilities producing, verifying, selling and distributing, exporting and importing, storing vaccines and medical biologicals.

According to Decision No. 47/2007/QD-BYT on implementation and application of "Good practice" standards on vaccines and biologicals production facilities; by 1 January 2011 all related facilities must reach the GMP-WHO standard. However, according to the National Institute of Hygiene and Epidemiology, by July, 2011 only one out of 4 production facilities in Vietnam reaching the GMP-WHO standard on vaccines and biologicals.

JAHR 2010 recommended that regulation be put in place to require that all drugs procured through competitive bidding or sold in retail pharmacies should meet GMP standards. It also recommended implementing a study on establishment of an inter-sectoral committee to combat counterfeit drugs or poor quality drugs and setting up a project to strengthen capacity for drug quality control, strengthen the capacity and role of the drug quality control system and adjust the policy on clinical trial of drugs and increase availability of staff to undertake inspection work. These activities have not been implemented.

There is still no vaccine quality reporting and information archive system by vaccine batch at the Drug Administration of Vietnam, nor is there a system on information sharing about quality of vaccines during the bidding process. Procedures for distributing, storing, and injecting vaccines to avoid possible adverse events from non-compliance with standard procedures are not yet tightly supervised. No system is set up to issue certificates of practice for immunization service facilities that require health workers to pursue better training.

#### 2.1.3. Safe and rational use of drugs

By 2008, 100% of public hospitals had established Drug and Therapy Committees. Contributions of the Drug and Therapy Committee to safe and rational use of drugs in hospitals over the past 12 years are undeniable. However, this activity seems perfunctory, and focused primarily on drug procurement and distribution while selection of drugs and supervision of drug use has been more limited. Therefore, the Ministry of Health issued Circular No. 22/2011/TT-BYT regulating the organization and operation of the pharmaceutical department of hospitals, placing greater emphasis on the responsibility of the pharmaceutical department for rational and safe use of drugs, and drug storage in the hospital.

In order to effectively report side-effects of drugs the Ministry of Health issued Circular No. 23/2011/TT-BYT in 2011 guiding drug use in hospitals where inpatient beds are available. In the Circular, it strictly governs indications, management, and guidelines for drug use and reporting on adverse drug reactions.

World Health Day 2011 focused on combatting drug resistance: "*No action today means no cure tomorrow*", in order to attract greater attention of countries to propose appropriate measures to address this problem. However, use of antibiotics in the community is still out of control. Purchase of drugs (including antibiotics) without a prescription remains widespread. In 2011, the Ministry of Health issued Decision No. 1790/2011/QD-BYT on a national program for supervision of antibiotics use and antibiotics resistance but no financing is available for implementation. The amounts of antibiotics in seafood and animal meats are, sometimes, higher than the threshold allowed. There is no close collaboration in management of antibiotics use in aquaculture and animal husbandry between the Ministry of Health and Ministry of Agriculture and Rural Development.

To provide information on drugs for physicians and drugs users, some private organizations have designed and posted information on the internet. One example is, www.thuoc.vn, with useful tools to help physicians in drug prescription and checking for pharmaceutical interactions, contraindications, dosing to make sure the prescription is rational and safe. There are other websites that provide information about drugs, such as thuocbietduoc.com.vn; www.camnangthuoc.vn and thuoc.net.vn. However, many hospitals do not yet pay attention to these websites or staff lack access to computer while prescribing the drugs.

Other measures are aimed at strengthening safe and rational use of drugs but have not yet been implemented, namely: reviewing and amending major drug lists (covered by health insurance) based on standard treatment guidelines and cost-effectiveness criteria; development of a model for control and monitoring of antibiotic use, and surveillance of antibiotic resistance throughout the country; establishment of skilled microbiology departments in hospitals; assessment and adjustment for more effective communications about rational and safe use of drugs, and the need for strictly following prescription regulations at retail outlets (with the exception of some efforts in Ho Chi Minh City); Development of a consumer protection association related to pharmaceuticals.

#### 2.1.4. Financing for drugs

In Decree No. 188/2007/ND-CP, the Ministry of Health has been assigned the task of "Leading and coordinating with the Ministry of Finance and relevant Ministries with a state management role related to drug prices; use measures to stabilize drug prices in the market". This responsibility is in conflict with other responsibilities of the Ministry of Health acting as the ownership representative for the state share in state-owned enterprises since enterprises in a market economy are intended to make profits. In this context, it is clear that controlling drug prices is very difficult. Drug spending per capita in 2010 was 22.25 USD increasing 12.5% over 2009 [42]. With the goal of caring for the people's health, rising drug costs is not always a positive indicator, as it may be one of the causes leading to difficulties for patients to access drugs, on the other hand for pharmaceutical enterprises rising drug prices is a good sign.

There are two reasons for high drug costs: high prices and high volumes. On drug price control, there has been no clear improvement over the past year. Little action has been taken towards implementing solutions proposed such as development of a generic drug policy, comparison of drug prices with local and international reference prices, supervision and declaration of retail prices, purchase price, management of margins, combatting conflicts of interest, increasing transparency of retail drug pricing. The only positive action seems to be Decree No. 45/2005/ND-CP, revising penalties for administrative violations in pharmaceuticals, and fines have been increased. Computerization of health insurance auditing to better control prescriptions in hospitals, and wider application of cost savings payment methods such as capitation or diagnostic-related groups (DRG) have also not yet been widely implemented.

#### 2.2. Medical equipment

#### Domestic production and importation of medical equipment

The Ministry of Health has paid substantial attention to development of domestic production of medical equipment to serve domestic needs, and eventually for export. On 29 June 2011, the Department of Medical Equipment and Civil Works held a workshop on "Promotion of domestic production of medical equipment - Integration and Development". The purpose of the workshop was to open up a forum for all participants to discuss and exchange views on difficulties and challenges in integration and development of medical equipment from which bold steps could be taken to promote production and marketing of the products, and gradually to exportation. However, Vietnam does not yet have independent sources of materials for production but relies heavily on imported materials, which account for over 60% of related imports. The remainder of imports consists of machines and equipment to serve production. Thus rising prices of materials in the world market create risk of inflated costs.

Presently, Vietnam imports almost all medical equipment. It is expected that by 2009, import turnover of medical equipment will be about 250 million USD. Import prices have tended to increase while import volumes dropped over the same period last year.

In order to strengthen domestic production of equipment, as proposed in the JAHR 2010, there is need for a situation analysis of domestic medical equipment manufacturing;

proposals of measures to improve quality of domestically produced equipment; development of national standards on medical equipment.

#### Medical equipment investment effectiveness

Investment in medical equipment is necessary to improve quality of diagnosis and treatment. However, excessive investment or irrational distribution of equipment will lead to abuse of diagnostic testing, especially under the fee-for-service mechanism. Furthermore, if technical staff or technicians are not properly trained, or recurrent costs for storage and maintenance are not earmarked, it is impossible to obtain effective use of equipment for diagnosis and treatment. The amount of modern equipment is increasing due to Decision No. 1232/2008/QD-BYT decentralizing power for health facilities to procure and repair equipment using their own recurrent budget or various funds held by the facilities. There is a need for a comprehensive plan to ensure rational and efficient procurement and utilization of medical equipment in response to this fragmentation.

Circular No. 15/2007/TT-BYT guiding implementation of autonomy and accountability in use of assets for joint ventures, partnerships and capital contributions to procure medical equipment for service provision at public health facilities has expanded options for mobilizing capital and further decentralized decisions on investments in medical equipment. However, there is a need for controls to avoid overinvestments and irrational use.

As was brought up in JAHR 2010, measures are needed to strengthen state regulations on investments in medical equipment. Examples include implementation of a medical equipment situation analysis; development of a regulatory mechanism on social mobilization for medical equipment; issuing regulations related to ensuring basic infrastructure and environment appropriate for operating medical equipment safely and effectively; development of a medical equipment data base for health facilities; issuing decisions and implementing activities in health technology assessment (HTA); improving qualifications of workers operating and prescribing use of medical equipment. So far little action has been taken to implement these recommendations.

#### Use and maintenance of medical equipment

In the JAHR 2010 report, rational, safe and economical use of medical equipment, and the need for equipment maintenance were indicated as priories. The main recommendations for solutions include: Implement situation analysis of medical equipment maintenance, service and repairs at health facilities, create a mechanism to create a maintenance and service fund for medical equipment from user fee revenues; Establish a fund for asset depreciation using hospital revenues to re-invest in medical equipment. Set up medical equipment maintenance and servicing teams in provinces to serve local medical facilities; strengthen human resources and specialized equipment for calibration and checking of equipment; establish some regional centers for equipment measurement and calibration; standardize quality of equipment test between health facilities. Nevertheless, few of these recommendations have been implemented.

#### 2.3. Medical infrastructure

The Government has a comprehensive Master plan for development of the health system, which proposes investment norms. The State also approved projects on upgrading hospitals, preventive medicine centers and commune health stations. Solutions relying on mobilization of financing through international aid and government bonds are being implemented. In addition, the state allows private companies to build and run health facilities. By the end of 2009, over 98% of all communes had a commune health station [31]. Some provinces such as Khanh Hoa with financial assistance from the Atlantic Philanthropies built/renovated 100% of its commune health stations, creating spacious health stations, while strengthening qualifications of health workers and expanding health insurance coverage to commune health station services, thus increasing the number of patients who seek care at the commune health station. However, physical infrastructure in many commune health stations remains weak, suffers from leaking or other forms of deterioration. In 2007, the Prime Minister issued Decision No. 950/2007/QD-TTg on investing in commune health stations in disadvantaged areas during the period 2008–2010, but because of lack of capital the commune health facilities have not yet been upgraded.

The district hospital system has been strengthened with financing from central and local budgets and government bonds. In 2009 The Prime Minister decided to add 25 district and regional hospitals in 19 provinces/cities to the list of investment projects to receive funding from government bonds. The proportion of funding reliant on government bonds in these projects ranges from 40%–100% depending on different provinces. Projects in mountainous, difficult regions are 100% subsidized by the government. The remaining fund will be supported by local budget or funding from other legal source to ensure completion as scheduled (by Decision No. 582/QD-TTg dated 7/5/2009).

The Ministry of Health's statistics report that as of 5/2009, 3750 billion VND from the government bonds issued in 2008 have been allocated for 425 district hospitals/centers and some regional inter-district hospitals, reaching 100% of the plan. In the 2009–2010 period, total funds for this activity are estimated at over 10 000 billion VND.

For investment from the private sector, the number of private hospitals has been increasing relatively rapidly. As of May, 2010 there were 121 private hospitals [66], concentrated mainly in Ho Chi Minh City (30 hospitals) and Ha Noi (12 hospitals). Almost all private hospitals are small, nearly 80% of these hospitals have fewer than 100 beds, and the largest has only 500 beds. Most private hospitals are general not specialized.

Although there are many projects on infrastructure and mobilized funding sources from the state bill, international aids and social mobilization, the hospital network still lacks investment funds. In addition, there is a need to supplement or amend or issue new standards for design and construction of health facilities, especially design for commune health station, district hospitals, district health centers/preventive medicine centers across all regions.

### **Chapter 6: Health Information Systems**

#### 1. Update on major policies

The policy orientation for developing the health information system in the past 2 years has not undergone any major changes, although the orientation to apply information technology has been emphasized. At the same time much work has been done to implement existing regulations.

The Eleventh Communist Party Congress (2011) continues the direction of: "Implementing comprehensive public administrative reform and modernization of the national administration. Continue to strengthen government systems, improve effectiveness of macro level management, in particular the quality of institution building and master plan development, forecasting capacity and the ability to ensure policy responsiveness to market economic conditions and international integration..."; "Promote the application of information technology in management and administration of government administration system at all levels" [17].

In 2010, the Prime Minister approved the National program on application of information technology in activities of state agencies for the period 2011–2015 [67], with the overall objective being: To develop and complete the information infrastructure, apply information technology widely in internal activities of state agencies and in provision of online information and public services to the greatest extent possible, and on a broad scale for the people and enterprises; create openness and transparency in state management work.

The Government has directed the Ministry of Health to implement effectively the 2011 plan, including the task of "Completing and standardizing criteria, processes to assess the level of satisfaction of the patients with health services in hospitals at all levels; develop a mechanism to organize assessment and disseminate results of the assessment so all hospitals have access to objective and scientific feedback, and on that basis to propose appropriate measures aimed at improving quality of health services [68].

The 5-year plan of the health sector (2011–2015) has set out the tasks of developing a health information system development plan to the year 2015 with a vision to 2020; gradual modernization of the means and mechanisms in the health information system; improve quality of health information (completeness, accuracy, timeliness); develop regulations and appropriate sanctions to ensure gathering of information from the private health sector; develop a system to monitor priority health issues, including: surveillance, reporting, response and forecasting of communicable diseases; data on non-communicable diseases and food safety; strengthen management and sharing of information from national health target programs. Strengthen the ability to synthesize, analyze and process data. Strengthen the dissemination of information in diverse forms appropriate for data users; strengthen use of information for direct management in each unit and each level of information providers and users for policy-making and health sector management.

In 2010, the Ministry of Health approved the project to strengthen the information technology organization system in state service organizations of the health sector for the period from 2010 to 2015, with the goal of contributing to improving quality and effectiveness of administration and management of health sector service units [69].

#### 2. Status of implementing assigned tasks

# 2.1. Completion of policies and plans for development of health information systems

#### Achievements

The Planning and Finance Department, is completing the draft Master Plan for Health Information System to submit to the Ministry of Health leadership with the objective by 2015 of having a health information system that is improved at all levels in order to satisfy fully, accurately and in a timely manner the information needs to serve management and monitoring of the sector. By 2020, the objective is to have a health information system that is fully formed along with application of modern information technology to supply information needed for management and exchange of information with other countries in the region and the world

The Ministry of Health has established a Steering Committee and Working group to strengthen health information according to Decision No. 723/2011/QD-BYT dated 15 March 2011. It is now also developing a project to standardize the health sector indicator system and develop detailed proposals for standardizing the health sector indicator system; at the same time, it is working on standardizing concepts, methodologies, method for data gathering within the health sector to contribute to the national statistical indicator system related to health.

A project on mHealth (using mobile phone technologies) for demographic groups that have difficulty accessing information has been set up in Vietnam by Pathfinder in collaboration with the Central Health Information Technology Institute (CHITI), the Science and Training Department of the Ministry of Health, Thai Nguyen and Lam Dong provincial health bureaus (the two provinces selected for piloting). This m-Health project is a model for health care that applies the mobile phone network with an automatic response system that allows people to call in and receive health care information.

The Vietnam health sector reform support project of Rockefeller Foundation has supported an evaluation of the situation and proposed solutions to strengthen public-private cooperation in provision of health services; potential and need for development of e-Health.

#### **Difficulties and shortcomings**

The Master Plan for Health Information System Development has not yet been issued. After it is issued, many other regulations will need to be developed to ensure implementation.

Up till now, 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 establishment of the Steering committee to strengthen health information systems, it is expected that relevant regulations will soon be put in place.

The private medical and pharmaceutical sector continues to expand, contributing to health care for the people, yet there are still no legal documents regulating tasks and responsibilities of the private health sector to update and report data about provision of health services. Private sector statistical reporting regulations are being developed and are expected to be issued by the end of the year

The number of health statistics reporting forms is excessive. Currently the list of indicators and method of calculation is being revised in order to standardize the indicator system. The system of indicators and reporting forms will be developed in 2012.

#### 2.2. Strengthen the ability to meet needs of information and data users

#### Achievements

The capacity to collect, gather and synthesize reports has been improved: The system of statistical reporting forms and data collection instruments in the health sector has been developed and issued since September 2009 and training has been organized in many localities.

The Ministry of Health is developing a list of specialized surveys to meet requirements for management and cross-verification of data from the periodic reporting system.

The Study of mortality and burden of disease was released, with important information and evidence for policy-making as well as many important recommendations to help strengthen the health information system.

Regarding increased application of information technology in processing, managing, transmitting health information: the existing software is gradually being improved and upgraded; Procedures codes are being developed for application in hospital statistics. In addition, Ministry of Health Directive No. 02/2009/CT-BYT was issued on promoting and developing information technology in the health sector including:

- Health sector units to have specialized division and appropriate staff;
- The need to reserve 1% of financial resources to spend on use and development of information technology;
- Setting up plans for investments in information technology infrastructure;
- Speeding up development of health information database archives to supply information to serve management and scientific research;
- Hospitals to apply the software for hospital statistical reporting and other software applications to ensure convenience in management, administration, professional work, gathering, processing, archiving and exchanging information within the sector..
- All central level health facilities, all provincial health bureaus, medical universities and junior colleges must have a website.

The Health Strategy and Policy Institute has begun to implement a study on assessing patient satisfaction in use of medical facilities across all regions of the country. This study involves standardization of indicators and the process for assessing patient satisfaction, with the final report expected by October, 2012.

Decision No. 517/QD-BYT dated 23 February 2011 regarding forms for listing medical care treatment costs to be used at all medical facilities will facilitate linking information on diagnosis and procedures with the financial information in medical facility financial information systems, and supports application of new provider payment mechanisms.

Decision No. 4604/QD-BYT issued on 29 November 2010 provides a standard traditional medicine patient record for inpatient and outpatient care and will facilitate management and research in the future.

#### **Difficulties and shortcomings**

Quality of statistical data has not been assessed. Situation analysis of resources for health statistics work has not been performed. Currently information in some areas is lacking

or does not meet quality standards. For example information about the private health sector, cause of death, risk factors for non-communicable disease, social mobilization activities of state health facilities, etc. The vital records system (under Ministry of Justice) has not yet been strengthened to register deaths in the community. The system of disease registers for non-communicable diseases is not yet functioning effectively and there is a lack of clarity on who should be responsible for this. Because agencies implementing national health target programs are also the unit to report on performance, objectivity of these reports remains limited.

The Ministry of Health has sent a request to the General Statistics Office to propose a list of surveys including the second National Health Survey. The National Health Survey could provide important information related to health status, objective assessment of the performance of national health target programs, risk factors, to compare with the first National Health Survey (2001–2002) and to adjust data from the statistical reporting system. If the Government approves this survey it will be an important opportunity for the health sector. However, a proposal has not yet been developed to mobilize funds for implementation.

The proportion of statistical indicators in the Health Statistics Yearbook that are disaggregated by sex is not high, including key indicators such as infant mortality or child malnutrition. Currently indicators are mainly disaggregated by region, urban/rural residence. The gathering of information in paper registers and the dissemination in printed format rather than electronic format inhibits the presentation of more disaggregations as required by data users.

#### 2.3. Strengthen information dissemination, analysis and use of statistical data

#### Achievements

Regulations on dissemination of data from the health system has been drafted, including regulations about the timing of the release of the health statistics yearbook each year. The Health statistics yearbook 2010 will be improved and issued early following the comments from the Steering Committee to strengthen capacity of the health information system.

A special section on health statistics has been set up on the Ministry of Health website.

#### **Difficulties and shortcomings**

Because central and local health agencies are slow to gather, synthesize and send statistical data to the Statistical Division (Department of Planning and Finance), statistical data for 2010 has not yet been released. The Health Statistics Yearbook 2010 has not been issued in a timely fashion to meet the requirements of health sector annual planning.

A policy on dissemination and sharing of health information has not yet been developed in a concrete and clear fashion. Capacity for analysis and use of data has not yet been strengthened to an adequate extent. Statistical data is still only analyzed with simple descriptive methods, and use of this data for planning and policy making remains limited. Indepth analysis to assess trends, to serve forecasting and planning is not yet performed on a regular basis.

Many sources of information in the health system lack a clear dissemination policy making it difficult for data users to access it. Database archives at each level are poor, and do

not yet include data from multiple sources; data are not managed in a scientific manner, are not updated, archived or transmitted using modern methods.

## **Chapter 7: Health Service Delivery**

# 7.1. Primary health care, preventive medicine and national target health programs

#### 1. Update on major policies

The 11th National Congress of the Vietnamese Communist Party passed the national strategy for socio-economic development 2011–2020, highlighted 12 orientations for socio-economic development, reform growth pattern, restructure the national economy, promote industrialization, modernization "Strive, by 2020, Vietnam will basically become a modernization-oriented industrialized country" [17]. The strategy refers to "Promotion of health care cause, improving quality of people's health care", in which it stresses on the tasks for preventive medicine and improvement of people's health. Specifically:

- Accomplishment of organizational structure and consolidation of the grassroots network. Strengthening capacity for commune health station, completion construction of district hospitals and upgrading provincial and central hospitals.
- Promotion of preventive medicine and keep major epidemic outbreaks under control. Halt and reverse the spread of HIV infection. Continue to reduce child malnutrition. Improvement of quality and secure food safety and hygiene.

*The National Assembly* passed the Law on Food Safety on 17 June 2010 (effective as of 1 July 2011).

*The Prime Minister* issued Decision No. 2331/QD-TTg, dated 20 December 2010, issuing the list of national target programs for 2011 that includes 15 projects. Among those programs, are several lead by the Ministry of Health, including: (i) Project on rural hygiene I the National Target Program for Safe water and rural environment; (ii) Projects on control of communicable disease, control of non-communicable disease, expanded program on immunization, school health in the National Health Target Program, (iii) National Target Program for Food hygiene and safety; (iv) National Target Program for HIV/AIDS prevention and control. The Prime Minister also approved the national program for safety at workplace and occupational health during 2011–2015 (Decision No. 2281/QD-TTg, dated 10 December 2011).

*The Ministry of Health has submitted to the Government* documents regulating details and instructions for implementation of some articles in the Law on Food Safety, and draft National strategy for food safety and hygiene for 2011–2020, vision to 2030.

The Government and Ministry of Health issued some normative legal documents to rationalize the Law on Infectious Disease Control: Decree No. 92/2010/ND-CP on bio safety in laboratories; Decree No. 101/2010/ND-CP applying some medical quarantine measures, coercive separation and typical epidemic control in the epidemic outbreak time; Decree No. 103/2010/ND-CP on cross-border quarantine; Decision No. 56/2010/QD-TTg on Steering committee for epidemic control and Decision No. 64/2010/QD-TTg regulating conditions declaring epidemic outbreaks and declaration of no more outbreak; Circular No. 48/2010/TT-BYT guiding reporting, information on infectious diseases. The Ministry of Health has developed a "Master plan for development of tuberculosis control and pulmonary diseases during the period 2011–2020".

*The five-year health sector plan during 2011–2015*, issued by the Ministry of Health, set forth specific tasks: Continue to consolidate, stabilize and invest in preventive medicine system, especially at the district level. Continue to promote active preventive measures, not to let major epidemic outbreak occur. Effectively implement activities of environmental illness, response to emergencies, disasters, catastrophes, new and strange epidemic diseases; strengthen health education and communication; strengthen school health activities; maternal and child health care and health care for the elderly and rehabilitative activities... Effectively implement projects under the national target health programs such as tuberculosis control, leprosy control; malaria control, dengue fever control; expanded immunization...; Projects on food safety and hygiene; projects on HIV/AIDS control. Coordinate with line ministries to give guidance and supervise environment hygiene activities, safe water supply, and management of medical wastes. Implement activities of environmental illness improvement, occupational health, hygiene and safety at workplace; injury and death prevention due to traffic accidents.

#### 2. Status of implementing assigned tasks

Below is a review of results and difficulties, limitations in implementing proposed tasks and recommendations, in which the review will focus on rationalizing measures for priority issues as identified in 2010, including: i) Strengthen health education and communications; ii) Keep health determinants and risks due to environment and lifestyle under control; iii) Promote preventive medicine, complete organizational structure and strengthen the grassroots health network.

#### 2.1. Strengthen health education and communications

#### Results

Some interventions have been made to enhance awareness of the people and community leaders, and local authorities of disease prevention and epidemic control, health protection, hygiene and environment and lead healthy lifestyles. Some new channels of information especially through internet, have been used including the private sector has made considerable contributions to available health information on internet.

The Preventive Medicine Administration has worked with Vietnam Television, Ha Noi Radio and Television, Ho Chi Minh City Television to develop communication messages on disease prevention and epidemic outbreak control.

The Food Safety and Hygiene Administration has carried out month of action for quality of food safety and hygiene 2010 and 2011, and coordinated with television, radio stations and the mass media agencies to widely disseminate messages of food safety and hygiene.

Priority was given to airing time, length of messages posted on radio and television; space and position of messages in printed newspapers, electronic newspaper in information, education and communication on HIV/AIDS prevention and control as set forth in the Joint-Circular No. 20/2010/TT-BTTTT-BYT. In the first 6 months of 2011, direct behavior change communications activities on risk of HIV infection have been promoted, increasing by 17% (over 1 million visits/head) over the first 6 months of 2010, totaling direct beneficiaries of communications on HIV/AIDS control to nearly 7 million people (nearly 400 visitors belong to drug addicted group).

The village health care network has been consolidated through the project Strengthening Basic Healthcare System in disadvantaged provinces of Vietnam, phase 1,

2007–2011 funded by GAVI, with considerable improvements in health communications capacity in the community.

The Ministry of Health has developed work plan for 2011 of the Program for health culture village.

#### Difficulties, limitations

People's awareness and improvement of health remains limited, especially people's understanding about risk factors of non-communicable diseases and how to change their behavior change to mitigate the risks. Communications are undiversified and fail to cover all target audiences.

There is lack of a comprehensive strategy for health education and communication. The current activities are fragmented, lack professionalism and have limited effectiveness. Communicators were rarely trained on communications skills, poor and unattractive incentives therefore it is impossible to require consultants with high qualifications in communications on preventative medicine.

Campaigns for physical exercise and sports are not yet widespread because of a lack of guidance for practice, appropriate methods, lack of practice facilities and sites such as green and spacious grounds, etc.

#### 2.2. Keep health determinants due to environment and lifestyle under control

Below is a review of achievements and challenges on disease control, infection control, food safety and hygiene, health environment, lifestyles of some segments of vulnerable population like children and the elderly.

#### Keep major epidemic outbreaks under control, response to new epidemics

#### Results

To strengthen epidemic surveillance system and rapid reactions to epidemics, the Ministry of Health issued Directive No. 06/2010/CT-BYT dated 07 December 2010 on strengthen epidemic outbreak control especially influenza type A(H5N1), influenza A(H1N1) in winter-spring, and directed Ho Chi Minh City Pasteur Institute, National Institute of Hygiene and Epidemiology to undertake surveys on epidemiologic factors related to cases of influenza A(H1N1) which were detected through the surveillance system. Moreover, the Ministry of Health also directed border gates to strengthen supervision of immigrant visitors from epidemic source to early detect infection cases and prevent epidemic outbreak of influenza A(H1N1) from becoming pandemic. The Ministry of Health issued Decision No.4128/2009/QD-BYT guiding supervision and control of influenza type A(H1N1). In summer of 2011, hand-foot-mouth disease outbreak and spread to some location, mainly in the southern region. The health sector has timely responded and contained it from widespread outbreak, reducing deaths.

Circular No. 39/2010/TT-BYT of the Ministry of Health regulates criteria, functions, and tasks of village health workers, which covers epidemic detection, participating in supervision and reporting epidemic developments, infectious diseases, non-communicable and social diseases and Directive 04/2010/CT-BYT of the Ministry of Health on strengthening epidemic control work in summer time.

Technical and financial support of some international organizations (ADB, WHO, USAID, Rockefeller Foundation) has helped strengthen quarantine work in epidemic-hit areas.

#### Difficulties, limitation

Coordination and sharing of information between preventative and curative care, and between the health sector and other sectors was below expectation. Some localities lack preventive health workers to carry out assigned tasks. It is very difficult to recruit new preventive workers while experienced staff are close to retirement age or have shifted from preventive medicine to curative care. Human resources for preventive medicine often have limited professional skills Village health workers in urban areas (township, town and ward) have not provided with subsistence allowance to work.

Some infectious diseases such as E. coli and influenza A(H1N1) and increasing deaths from rubella and hand foot and mouth disease are generating new challenges for the preventive health network.

# HIV/AIDS, tuberculosis, leprosy, malaria, dengue fever control, expanded program on immunizations

#### Results

Increase in HIV/AIDS has begun to slow down: in 2010, there were 13 815 new patients compared to 15 713 new patients in 2009 [70; 71]. In the first 6 months of 2011, the number of new HIV-infected people, accumulated patients and deaths are fewer than the first half of 2010. This results from effective implementation of national strategies and policies for HIV/AIDS control. The department of HIV/AIDS control is developing new strategies and a new national program for HIV/AIDS control will be designed for the 2011–2015 period (Prime Ministerial Decision No. 2331/2010/QD-TTg). Pilot a treatment regimen to replace opioids with methadone has been appreciated effectively, and will be replicated throughout the country (Notice No. 119/2010/TB-VPCP). Some new regulations are issued such as Circular No. 01/2010/TT-BYT of the Ministry of Health regulating responsibility and sequence of informing results from HIV test with positive results; Circular No. 09/2011/TT-BYT guiding conditions and scope of technical work for health facilities treating anti-HIV drugs. HIV/AIDS prevention and control activities will be strengthened through project "Strengthen capacity of the National committee for AIDS control, drug abuse, prostitution on coordination and policy advocacy" funded by UNAIDS (Decision No. 202/2011/QD-VPCP).

The Preventive Medicine Administration developed and issued guidelines for surveillance and prevention of dengue fever (Decision No. 1499/QD-BYT, 2011) and guidance for management of dengue fever epidemic source (Decision No. 2497/QD-BYT, 2010). At present, Vietnam is participating in clinical trial of dengue fever prevention vaccine.

The expanded program on immunizations continues to be strengthened and consolidated. Immunization coverage in children reaches over 90%. The Ministry of Health issued a handbook of quality and standard procedure for assessment of reaction after injection with technical assistance of WHO. The project on strengthening capacity of grassroots health system funded by GAVI trained and granted certificate of injection skills for grassroots health workers, contributing to improvements in quality of immunizations in 10 project provinces.

#### Difficulties, limitations

Prevention of mother-to-child transmission of HIV through expanded testing and screening of HIV/AIDS at antenatal examination and counseling for mothers, and provision of antiretroviral (ARV) was weak and within limited scope; HIV infection through sexual intercourses tends to increase, and poses new challenges to HIV/AIDS control work.

Injection of hepatitis B within 24 hours after birth was only 20.7% due to supply of vaccine. Rubella disease is not yet included in the expanded immunization program, while rubella morbidity is on a rise and threatens the fetus to mothers who get early rubella during pregnancy. Regulations of the Ministry of Health require that health workers implementing the immunization program should have a certificate of training in immunizations. Annual training on expanded immunization merely concentrated in limited number of health workers while almost all grassroots health workers had no training on immunization and the training contents did not aim at quality and safety in immunization work.

Multi-drug resistant tuberculosis imposes great challenges due to high treatment costs. Dengue fever is still prevalent with over 100 000 cases in 2010, doubling malaria cases. There is no vaccine for dengue fever.

#### Improvement of quality and secured food safety and hygiene

#### Achievements

In 2010, the Ministry of Health issued Circular No. 13/2010/TT-BYT guiding management of rapid test kit of foods. In 2011, the Ministry of Health issued Circular No. 13/2011/TT-BYT guiding technical division by level to undertake tasks, targets and procedures for laboratory testing to serve the state management in quality and food safety and hygiene in the health sector, and Circular No. 14/2011/TT-BYT guiding food sample taking to serve inspection, check-up of quality and food safety and hygiene. The Ministry of Health issued 35 Vietnamese standards for food in 2010–2011 [72].

Human resource and equipment in food safety and hygiene has been developed and strengthened at all levels with 15 inspectors of the Department, and inspectors of provincial departments of food safety and hygiene in 54 provinces/cities. Since early 2010, inspectors of the department and food safety laboratory system have proactively implemented inspection, post-examination around the year.

Inspection and check is done on schedule with close inter-sectoral collaboration, violations of food safety and hygiene are posted on mass media, which directly influence responsibilities of food processing and distribution facilities. Health education and communications are delivered at central and local level making contributions to changing attitudes of the people in food safety and hygiene.

Food safety and hygiene work has helped control food poisonings, reducing food poisoning cases and victims in 2010 compared to 2009, and in the first quarter of 2011 compared to first quarter 2010 [72].

#### Difficulties, limitations

Investing in resources and funding for management of food safety and hygiene remains limited; lack of test equipment and backward instruments; lack of mobile equipment and rapid test kit. Failure to involve social participation, especially associations, unions and large-scaled enterprises in some public service phases to serve the state management in food safety and hygiene [72; 73].

Inter-sectoral collaboration in management of food safety and hygiene merely concentrates on some burning issues that cause social commentary, while failing to actively manage pollution risk in the food supply chain. Many food processing facilities are small-scale, unstable and difficult to control. Economic crisis plus inflation induce the people to purchase food at cheap price and unsecured quality.

Although inspection and check of food has been strived, it was not strongly carried out at communal level where there is a great bulk of food processing, production and trading facilities. Technical capacity of inspectors was limited therefore they were unable to detect all violations or if the case were detected, they did not penalize but just warn them. During the inspection, sample taking process was rarely done with slow announcement of test results, thus delaying penalties on infringement.

Scientific research and staff training was limited without long-term strategy. Due to heavy workload, some government staff, public servants did not spare much time for upgrading their professional qualifications and skills.

#### Management of health environment

#### Results

The Department of Health Environment Management was founded in May, 2010 with the function to assist the Minister of Health to organize, implement tasks of the Ministry related to environment, including: environmental protection in health facilities, environmental illness; hygiene and occupational health, prevention of occupational diseases and injuries, health determinants due to climate change; chemical management, antiseptic products, pesticides in household appliances and medical equipment and other tasks related to environment as regulated by the law [74; 75]

**Medical waste:** The Department of Health Environment Management developed a master plan for medical waste management for the period 2010–2015 and an orientation to the year 2020 and a manual for medical waste treatment for commune health stations, hospital sewage treatment, treatment of hazardous solid waste and guidelines for resolution of hard-to-solve environmental pollution in health facilities considered as heavy polluters. The Ministry of Health has taken a loan from the World Bank to manage medical waste and supervise installation of medical waste treatment equipment in some health facilities.

**Occupational health:** The Department of health environment management participated in assessment of the national program for labor protection, safety at workplace, occupational hygiene during 2007–2010; develop a national program for labor protection, safety at workplace, occupational hygiene during 2011–2015; assist the Ministry of Health to issue Joint-Circular No. 01/2011/TTLT/BLDTBXH-BYT dated 10 January 2011 on guiding organization for implementation of safety, occupational hygiene in working environment replacing Circular No. 14/1998/TTLT; direct strengthening implementation of the project on occupational disease prevention (Decision No. 152/2010/BYT), including revise, supplement the standards for diagnosis and audit of five occupational diseases and rationalize the Directive on protection of health for laborers and health workers. The Department also directed provincial preventive medicine facilities to develop a plan for labor health standards, preparing dossiers and surveillance system of asbestos-related diseases, organizing workshop on strengthening health care and protection for laborers and prevention of occupational diseases and communications on labor safety on mass media.

**Injuries/accidents control:** The Health Environment Management Agency helped the Ministry of Health to develop an evaluation plan for the national strategy for injuries prevention 2002–2010, develop a plan for injuries prevention and injury/accidents surveillance system for the 2011–2015 period, directing and supportively supervising

expansion of safe community model and injury prevention for children. The Agency also guided implementation of first-aid for injuries before hospitalization (in collaboration of medical service administration); develop a plan for supervision of alcohol concentration in blood of accident victims, develop monitoring and evaluation plan (work with the national committee for traffic safety).

**Community environmental health:** The National target program for rural water and sanitation for the period 2011–2015 is one of 16 national health target programs approved by the National Assembly on 19 November 2011, and in which, the health sector has been assigned responsibility to organize implementation of the project on rural environmental sanitation, to collaborate with the Ministry of Agriculture and Rural Development and other related ministries to update the National Strategy on rural Water and Sanitation to submit to the Government for approval; develop and issue national standards on clean water and environmental sanitation in rural areas; revise the handbook for development, use and maintenance of hygienic latrines in households and in public places.

**Environmental illness:** The Ministry of Health has developed a draft guidelines for assessment procedures of health effects due to industrial environmental pollution; regulations for chemical management pesticides products in household appliances and medical equipment; collaborate to develop governmental Decree on assessment of strategic environment and environmental impacts.

**Natural disasters, catastrophes:** The Ministry of Health is prepared to address disaster consequences, including first aid and epidemic outbreak control related to polluted water. These plans are updated on a regular basis.

**Climate change:** The Ministry of Health has developed a detailed plan to implement the national target program in response to climate change; develop preparedness plan for climate change of the health sector in 2010–2015; work with the World Health Organization to develop proposals and selection of implementing units for a study on mapping of affected regions in terms of health effects due to climate change; check and supervise in some provinces responding to climate change; organizing dissemination seminar on preparedness plan for climate change of the health sector for the 2010–2015 period; design, print communications materials on climate change and distribute to 63 provinces/cities.

#### Difficulties, limitations

Environmental pollution is rising due to economic development, urbanization and increasing population. Awareness among citizens, especially among enterprises, about environmental protection remains limited.

The Department of health environment management is a new agency lacking human resources (quantity and quality), funding, medical equipment and experience. Some functions and tasks are not clearly distinguished with other departments of the Ministry of Health, and implementing units on health environment at provincial and district levels are not yet clearly designated tasks to do it.

Inter-sectoral collaboration in health environment is not yet strict at central and local level.

In the normative legal system, there is no specific guidance and technical standards.

Funding for medical waste management activities is insufficient.

The health sector has not yet undertaken supervision and studies on health effects of injuries, domestic violence, environmental pollution, accidents at workplace, occupational

diseases to advocate and influence relevant agencies to make joint contributions to mitigating risks, disease prevention and injury.

#### Lifestyle related health problems

#### Results

The draft Law on Tobacco Control is under discussion in the government and national assembly sessions, and expected to be passed by the NA in 2012, which covers drastic interventions as recommended in the convention on tobacco control, e.g., increased taxation on tobacco, pictorial labels, effective ban on smoking and prevent youths to access tobacco. The draft policy on alcohol abuse is under development by the Ministry of Health. The Government issued Decree No. 76/2010/ND-CP on amendment of and supplement to Article 11 Decree No. 06/2009/ND-CP, dated 22 January 2009 of the Government in penalties in administrative violations in alcohol, tobacco production and trading activities will tighten up compliance to legal documents in tobacco and alcohol control.

School health project, one of seven projects of the national target health programs, was approved by the Government in 2011, is in proactive preparation for implementation. The project covers screening of some school diseases that can be effectively treated during school age. Completed development of national technical standards for school hygiene. The Ministry of Health is developing a project on school nutrition for 2012–2016 period.

The Ministry of Health is drafting the national action plan for prevention of risk factors of non-communicable diseases during 2011–2015. The Ministry of Health attended the conference on non-communicable diseases control in West-Pacific region, and the first global conference on healthy lifestyle and control of non-communicable diseases in Russia in April 2011.

#### Difficulties, limitations

Presently, school health program is in short of resources while collaboration between the health sector and education sector is not yet fully strengthened. Student's parents' awareness of school diseases is very poor.

Health care for the elderly is weak due to inability to fully screen and manage chronic diseases and the elderly has limited mobility to access appropriate health services.

Non-communicable diseases are left unconcerned. The plan/strategy for noncommunicable diseases control has not yet been approved. Lack of a routine data collection in lifestyle-related risk factors, living conditions related to chronic diseases, noncommunicable diseases to serve supervision and early determine groups with high risk. Interlevel collaboration in prevention and management of acute conditions of chronic diseases remains weak.

Human resource, capacity of laboratory and financing resources to screen and detect non-communicable diseases are limited.

# 2.3. Promote preventive medicine, complete organization structure and strengthen grassroots health network

#### Results

The preventive medicine system is strongly reinforced at the central level, strengthened and upgraded at local level (province, district, commune). Circular No.

03/2008/TTLT-BYT-BNV helps remove some difficulties in management of commune health station network.

The Ministry of Health has assessed implementation of the National benchmarks for communal health (2001–2010), made adjustments and promulgated a new set of national standard for commune health during 2011–2020, creating a new vision for health care at the commune health station in order to improve quality and expand the scope of primary health care activities, and at the same time including these indicators in the implementation of the National Target Program on New Rural Development.

The national benchmark for preventive health started off in 2011, marking a criteria to assess performance of preventative units and help orient investments in preventive medicine.

The state budget for preventive medicine exceeds 30% at both central and local level as requested by the National Assembly Resolution No. 18/2008/NQ-QH12.

Some international aid projects are being effectively implement to invest and upgrade the preventive medicine network in the provinces. The project on infectious disease prevention in the Mekong region, phase 1 funded by ADB completed. Phase 2 (2011–2015) is ongoing in 20 provinces and in hygiene and epidemiology institutes, and Pasteur Institute. The project continues to strengthen physical infrastructure, medical equipment and training a network of preventive medicine from district to central level. Some other projects like the Mekong Delta Health Support Project, the North Central Coast Health Support Project (funded by the World Bank), the Health system support project (funded by Global Fund)... also involve substantial investments in preventive medicine in terms of physical facilities, equipment and health worker training.

Inter-sectoral collaboration in health care has made impressive strides. Most notable is the collaboration between the health sector and agriculture and rural development sector in prevention of the pandemic influenza A(H5N1), A(H1N1), zoonotic diseases, safe water supply and sanitation in rural areas. The Inter-sectoral steering committee for food safety and hygiene at central and local level has also been strengthened. Collaboration has also improved in implementing the national program for labor protection, labor safety, labor hygiene and in work with the national committee for traffic safety to develop a plan for supervision and impact assessment of interventions (alcohol, driving).

#### Difficulties, limitations

In preventive medicine, the organizational model is not yet unified nationally and remains highly fragmented across different units, especially at the provincial level (preventive medicine, HIV/AIDS control, food safety, tuberculosis, malaria and social disease centers,...) This leads to limitations in coordination of human resources, equipment, work facilities and information sharing in professional activities. Lack of coordination between laboratories in preventive medicine facilities and hospitals can lead to artificial increases in the demand for investment in equipment. Much equipment provided to the preventive medicine network remains underutilized.

The draft Circular guiding functions, tasks, power and structure of district health center has been developed but not yet issued.

Although strengthened investments have received attention, but in general preventive medicine at all levels, especially at the grassroots level, continues to face many difficulties, insufficient or rundown facilities; lack of essential equipment, shortage of staff...

District health centers do not yet have a source of investment funding (except for a few external assistance projects). Income of preventive medicine workers is inadequate to attract new staff or retain existing professional staff.

Funding, instruments and responsibility for supportive supervision are weak, supervision of health care activities at the commune and village levels is insufficient and not yet effective.

#### 3. General assessment

2010 was the final year for implementing the national strategy for the protection and care of people's health during 2001–2010 under Prime Ministerial Decision No. 35/2001/QD-TTg. Results of implementing the Strategy indicate all basic health targets have been achieved or surpassed. The year 2010 is also the second straight year the health sector achieved all 19 targets set by the Government and National Assembly. Vietnam has achieved many health related MDGs ahead of schedule. However, the preventive medicine sphere remain huge difficulties, limitations expressed in the problems below:

- 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, HIV/AIDS control... leading to 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 [4] 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 "socioeconomic 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.

## **7.2. Medical examination and treatment**

#### 1. Update on major policies

In recent years, policy orientation for health care seems unchanged. *The Eleventh Party Congress* continues to emphasize on health care system development towards equity, efficiency and quality. Specifically:

- Accomplish the organizational structure and strengthen the grassroots network. Strengthening capacity for commune health station; ensuring everybody access insured health services with convenience; effectively implement health care policy for the poor, children and ethnic minority groups and the elderly.
- Reform operation mechanism, especially health financing mechanism in public health facilities towards autonomy, openness and transparency; strongly promote both modern and traditional medicine.
- Overcome overcrowding in hospitals. Standardize quality of care, quality of hospital, and gradually approach regional and international standard. Enhance medical ethic, and strive to push back negative acts in health care examination and treatment activities. Strengthen capacity and upgrade hospitals at all levels. Modernize some specialized leading hospital. Construct more specialized hospitals with high quality in big cities, especially encourage investors to establish quality specialized hospitals. Everybody's needs for health care should be met.

*The government directed the health sector* to develop five-year health sector plan and annual work plan 2011, complete normative legal documents to rationalize the Law on Examination and Treatment; reforming management mechanism and improving quality of care.

- Accelerate submission of draft detailed regulations and instructions for implementing the Law on Examination and Treatment; Continue to effectively implement solutions to expand types of medical service and improve quality of care (with a focus on obtaining feeds from patients to propose appropriate measures). Chair and collaborate with Ha Noi People's Committee to develop a project on Building international hightech health center in Bach Mai hospital [68].
- Develop the health sector so that everybody is provided with basic care, and able to access and use quality services [76].
- Implement action plan for development of the Vietnamese traditional medicine by 2020. Modernize and strongly develop traditional medicine and pharmaceuticals in the protection, care and improvement of people's health; strengthen and develop the traditional medicine and pharmaceuticals network [77].
- Continue to reform administration mechanism, improving quality of care at grassroots and central level. Strengthen secondment of staff to support and improve quality of health workers at lower levels. Enhance medical ethics; striving to push back negative acts in health examination and treatment activities. Strict management of private health practices; Ensure good implementation of health care policy and health insurance for the poor. Reduce hospital overcrowding (mainly through construction and upgrade hospitals) [78].

*The five-year health sector plan (2011–2015)* emphasizes key tasks to consolidate, develop and improve quality of care, including:

- Complete a normative legal system (Implementation of the Law on Examination and Treatment; regulations, care pathway in clinical procedures; strict punishment on any violation or infringement of practice morals.
- Continue to strengthen and accomplish health care network; Prevention of overcrowding;
- Adjust clinical care division at different levels toward expansion of techniques, services, creating favorable conditions for patients to access quality services closest to where people live and work; continue to implement the national policy on traditional medicines and pharmaceuticals; strengthen organizational structure of traditional medicine from central to local level.
- Improve quality of care: Pay special attention to abuse of drugs, tests and para-clinical services and high-tech services. Deploy regulations for granting practice license as endorsed in the Law on Examination and Treatment; Keep promoting technical support and directions for lower levels, and rationalize Decision No. 1816/QD-BYT.
- Improve hospital management capacity, hospital financial management: Implement Government Decree on reforming operation and financial management mechanisms.

## 2. Status of implementing assigned tasks

## 2.1. Achievements

#### 2.1.1. Strengthened access to and equity in health care

The grassroots health care network is continued consolidated with joint efforts of the health sector and local authorities. The Ministry of Health and Ministry of Internal Affairs agreed to continue implementing Joint Circular No. 3/2008/TTLT-BYT-BNV on organizational structure of local health care network from which comprehensive assessment will be made, and probably a revision will be made after review, if needed. Continue to implement Decision No. 950/2007/QD-TTg on investments in commune health stations on difficult areas.

Implementation of the Law on Health Insurance with increased benefit package for the insured, the Ministry of Health prepared and enacted the Program 527/CTr-BYT on enhancing quality, satisfaction for insured patients, pilot capitation-based payment method and accelerates purchase of health insurance for the poor, children under-six, target groups and ethnic minorities. By end of 2010, health insurance coverage was about 60% of the total population (50 771 million people). Continue to study on expansion of insured health examination at district and communal level. Implemented health care examination in 60% of total commune health stations [79].

The Instructions for health care for the elderly in implementation of the Law on the Elderly is under development.

#### 2.1.2. Development of health care network in response to people' needs for health care

In implementation of Resolution No.18 of the National Assembly, Project 47 on investments, renovation and upgrading district and regional hospitals and Project 930 on investments in general hospitals, specialized hospitals in oncology, TB, mental health, pediatric-obstetric care has been approved by the Prime Minister and are undergoing.

Project 47 has been implemented since 2008 with government bond funding totaling 9150 billion VND, equivalent to 65.4% of the planned amount. Some 591 district hospitals have been upgraded and renovated using these funds. Project 930, which was approved and implemented starting in 2009 has received funding from sales of government bonds in the amount of 5200 billion VND, equivalent to only 16% of the planned amount for 51 provincial general hospitals, 48 specialized tuberculosis hospitals, 35 specialized mental health hospitals, 23 specialized obstetric/pediatric hospitals, 6 oncology hospitals/centers, Can Tho Pharmaceutical and Medical University, Thai Nguyen Central general hospital, the National Institute for Infectious and Tropical Diseases (reported by Department of Planning and Finance).

The two projects above reflect strong interest of the Government in increasing investment for health, improving human resources for health with a breakthrough investment in health care system. However, Governmental Resolution No. 11 on cutting back public investments will affect allocations of government bond funds for the health sector.

The project on establishing high-tech medical center is under development with a view to bringing in full play technical capacities of terminal care level, generating a momentum for advanced techniques development in health care, and in line with other regional countries.

Organization of wide health care provision network. Much effort has been made to increase actual patients beds in hospitals to 187 998, which is 18 520 more beds than 2009.<sup>4</sup> Bed norm is 20.5 per 10 000 people (excluding beds at commune health stations), reaching the targets set out by the National Assembly. However, bed ratio in private facilities is only 0.9 bed per 10 000 people [80], behind the targets set by the Government of 2.5 private beds per 10 000 people. Nationally there are 5 traditional medicine hospitals under various ministries, 53 traditional medicine hospitals in provinces/cities with an average size of about 127 planned beds and 140 actual beds. There are 13 provinces/cities that have not yet set up traditional medicine hospitals. Within general hospitals, 42.3% of hospitals have a traditional medicine department, 47% of hospitals have a traditional medicine group. In 2010, traditional medicine beds accounted for 7.3% of all hospital beds nationally.

The number of commune health stations achieving national benchmark in 2010 was 80%, including, 95% of commune health stations having a midwife or obstetric-pediatric assistant doctor, 70% having a doctor, 74.3% having a traditional medical practitioner, 79.3% using traditional medicine in health care provision, 79.9% having a medicinal herb garden, and 85% of villages served by a village health workers.

Capacity to provide health services has improved. In 2010, hospitals provided outpatient examination and treatment for 111 128 460 patient visits, an insubstantial increase over 2009; 9 908 758 inpatient admissions, a 3.6% increase over 2009 in general, but for the private sector this constituted a 10.9% increase, much higher than the average increase. The proportion of medical outpatient visits treated using traditional medicine in 2010 at the commune level was 24.6%, at the district level 9.1%, and at the provincial level 8.8%. The proportion of inpatient treatments using traditional medicines combined with modern medicine at the district level accounted for 17.1%, and at the provincial level 8.6%.

Average bed occupancy rate in 2010 was 98.8%, declined over 2009 (103.4%). Length of stay dropped slightly (6.8 days in 2010 vs. 7 days in 2009). Overcrowding is still concentrated in some central and highest referral hospitals, especially in some specializations like: oncology, cardiovascular diseases, endocrinology and metabolic disorders, neurology, urology, pediatrics, etc.

Number of surgeries in 2010 are 2.2 cases, which is 4.8% increase over 2009, in which special surgery increased by 11%, endoscopy surgeries increased by 16.5%. The number of medical procedures rocketed to 8.8 million cases, which is 37% increase over 2009. Year 2010 marked a milestone in high-technology development with two first successful heart transplant cases, and kidney transplant from donors who were brain dead, and liver transplant for 2-month baby. Other high-tech services such as cardiovascular diseases, blood vein, endoscopy operations and intervention endoscopes, early diagnosis of cancers, application of robots in surgery to strengthen technical capacity of terminal hospitals have been greatly improved.

After two years implementing the project on rotation, secondment of professional staff, there are 3665 staff visits from central to support the provincial level, and 1905 staff visits from province to support the district level. Some 4206 techniques were transferred to lower level; 3234 staff visits from district to coach the communal level through examinations for 3 539 314 patient visits. Presently, there are about 450 staff taking rotational roles in supporting lower levels [81]. In order to institutionalize this project, the Ministry of Health is steering the development of a Decree on obligation and responsibility of health workers to regions with socio-economic disadvantages.

Research is underway to adjust the referral system. A circular guiding classification of medical procedures by level of facility is being prepared for promulgation.

#### 2.1.3. Service quality is receiving attention

The health sector has initially paid due attention to standardized quality of care, quality of hospital to approach quality standards at regional and international scale. The Ministry of Health has established a functional Quality Control Division at Medical Service Administration. Also, a national action program on improvement of medical laboratory management capacity by 2020 has been issued. Three centers for laboratory quality control have been set up and functionalized. A joint circular on hospital care quality management and a national plan for improvement of service quality is under development. Hospital inspection remains done every year. There are some quality control measures: peer review of medical records, phone hot line set up to collect feedback from patients.

National technical standards for health care facilities are also under development, and this is seen as one of the foundations for assessment and granting of practice license for health care providers regardless where they are from, either public or private sector. The Ministry of Health has issued Circular No. 41/2011/TT-BYT dated 14 November 2011 providing guidelines for eligibility criteria, procedures for issuing medical practice licenses and certificates. The Steering committee for drafting treatment guidelines, technical procedures was established and is promoting the development of treatment guidelines and technical procedures [82]. The Focal technology and science program of the Government for the period 2011–2015: "Research on application and development of advanced technologies to serve the protection and care of community health" has been approved (Decision No. 3061/QD-BKHCN, dated 30 September 2011) with the objective of mastering some advanced techniques and technologies in prevention, diagnosis and treatment of human disease and disability; successful application of advanced techniques and technologies for production of high quality pharmaceuticals, etc.

#### 2.1.4. Strengthen hospital management

The project on hospital payment mechanism reform has been submitted to the Government. A new fee schedule with correct and full hospital costing to maintain and

develop a health care network is under development. Medical service management is of great concern of the Ministry of Health. In 2010, apart from training institutions on hospital management of medical and public health schools, the center for medical service management capacity development under Medical Service Administration is set up with a long-term plan to strengthen capacity in response to training needs for hospital management. The Ministry of health has organized some training courses on hospital management, financial management, quality management for hospital leadership and heads of functional departments were organized. The training program on hospital management is being revised but for immediate future, basic training courses on hospital will be held and subsequent advanced training courses will be on: quality management, human resource management, hospital financial management, etc.. [83]

# 2.1.5. Continue to complete the normative legal system in health examination and treatment

In 2011, the Government or issued various important legal documents related to quality and management of medical examination and treatment services: Decree 87/2011/ND-CP dated 27 September 2011 regulating details for implementation of some articles in the Law on Examination and Treatment with 4 main contents: Regulations on forms of medical service facility organization; the roadmap for issuing licenses for state medical facilities; roadmap for issuing practice licenses for people practicing medicine in state medical facilities; national technical standards, quality management standards and organization of quality accreditation for medical facilities. On 21 October 2011, the Government issued Decree No. 96/2011/ND-CP regulating penalties for administrative violations in medical examination and treatment stipulating what constitutes the various types of violation, the forms and levels of fines and jurisdiction for imposing penalties for administrative violations in the fields of: medical practice and use of practice license; conditions and use of medical facility licenses; technical professional regulations; use of pharmaceuticals in inpatient treatment; conditions for practice in massage, scientifically assisted birth, redetermining sex, donating organs and body parts and other areas. On 14 November 2011, the Government issued Decree No. 102/2011/ND-CP on medical examination and treatment liability insurance, effective as of 1 January 2012, according to which, all medical facilities will have to purchase medical liability insurance; insurance companies will have to compensate medical facilities in cases of adverse events or professional medical error caused by mistakes, negligence, carelessness of the medical practitioners at the medical facility that affect patient health. The Ministry of Health has issued some legal documents such as: Circular No.07/2011/QD-BYT guiding nursing care for patients in hospitals; Circular No. 8/2011/TT-BYT guiding nutrition, nutritional regulation in hospital; Circular No. 50/2010/TT-BYT guiding combination of traditional and modern medicine in health care process. Circular No. 15/2011/TT-BYT regulating organization and retails of drugs in hospitals, Circular No. 22/2011/TT-BYT dated 10 June 2011 regulating the organization and operations of the hospital pharmacy department; Circular No. 23/2011/TT-BYT dated 10 June 2011 guiding use of pharmaceuticals in medical care facilities; Circular No. 31/2011/TT-BYT issuing and guiding implementation of the essential drug list used in medical care facilities and can be reimbursed by health insurance fund.

The master plan for cancer control network and the master plan for developing the network of tuberculosis and lung disease hospitals were issued during 2011. Other comprehensive master plans are being developed, submitted for approval including master plans for networks in mental health, pediatric and obstetric care and medical use of radiation.

## 2.2. Difficulties and shortcomings

#### 2.2.1. There are available barriers to access and equity in health

There is no consistent health care system at central, provincial and district level, which somehow affects primary health care work and implementation of the national target health programs.

There is no classification of private hospitals therefore it causes come difficulties in charging user fees on insured patients when visiting private facilities.

There exist troublesome administrative procedures in referral of insured patients and in health care examination. Some beneficiaries have to sign up insurance scheme according to the roadmap. Only about 50% of enterprises participate in health insurance. Even though the Government has a policy to subsidize 50% of the premium for health insurance, implementation of the purchase of health insurance for the near poor is facing many difficulties, including identifying eligible near poor individuals. The difficulties expose in copayment mechanism, especially for those with chronic diseases, severe diseases, high health care costs, the poor, near poor, ethnic minorities. Hassles in payment between health care facilities and insurance agency.

The referral network is not yet effective. Regulations on which types of technical services should be available at different levels of the system are only indicative, and are not binding. Hospitals in lower level can develop medical techniques corresponding to their technical capacity and facilities. There is no regulation to set proportion of implementing techniques in hospitals at different levels. Higher level hospitals still admit patients with minor illnesses and implement simple procedures that could have been implemented at lower levels of the system. Referral of insured patients is also facing difficulties as lower facilities seem to retain patients while patients want to go to higher level, which might cause overcrowding and quality of care in receiving facilities. Patients directly paying user fees when seeking care are not obliged to follow the referral system, leading to overcrowding at higher level hospitals.

The traditional medicine network has been founded and developed but most of the targets in the national policy for traditional medicine have not been obtained. In some documents, and policies, there are inconsistency between traditional medicine and modern medicine. Limited investment is made in traditional medicine while awareness of magnitude of the traditional medicine network is still low.

#### 2.2.2. Effectiveness in health care service provision should be paid further interest

Besides removing barriers for health care facilities through a new fee schedule (Circular No. 14 is too backward, and unable to secure cost recovery and facility development), it is recommended to overcome negative side of hospital autonomy by Decree No.43/ND-CP such as risk of drug, test abuse, and unable to arrange sufficient staff to take care for patients which affects quality of care and waste of resources, quality control has initially been done; there exits non-recognition of lab test results between health facilities, which causes great waste. High technology and new drugs are being applied widely but no medical technology assessment is made therefore we are unable to remove ineffective technology and inefficacious drugs, which attributes to escalating medical costs.

#### 2.2.3. Difficulties in controlling quality of medical examination and treatment services

Quality control program has initially been done. There is no national reference standard laboratory; therefore it is unable to take quality inspection of lab tests at the national scale.

A national medical service quality control system has not yet been set up. Methods for controlling, managing quality of medical services have been set up in an unstructured manner as the need arises, and only in a few pioneering hospitals.

No external quality control measures have been implemented yet. There is no program on inspection, assessment of pharmaceutical use, implementation of medical procedures and medical guidelines on a routine basis and by topic. Currently there are a few national clinical quality indicators, but measurement of clinical quality has not yet been widely implemented in hospitals.

Overcrowding at hospitals has declined slightly in some highest referral hospitals, but remains widespread. Professional technical capacity at lower level facilities is still limited. Progress of investing in terminal specialized hospitals is very slow, and fails to meet requirements. Autonomous mechanism tends to break up referral system while higher facilities also deliver many normal techniques in health examination and treatment.

## 7.3. Population - Family Planning and Reproductive Health

## 1. Update on major policies

The Eleventh Party Congress set out the goal "maintain replacement fertility, ensure appropriate sex balance and improve the quality of the population"; "maintain stable population growth at around 1%" [17]... "Implement effectively reproductive health and health care for mothers and children, reduce strongly the child malnutrition rate, contribute to improving the quality of the population."

The Prime Minister approved the National Strategy for Population and Reproductive Health for the period 2011–2020 (Decision No. 2013/QD-TTg dated 14 November 2011). The Government has issued other legal documents related to population as follows: Government Decree No. 18/2011/ND-CP, dated 17 March 2011, revising item 6 under Article 2 of Government Decree 20/2010/ND-CP dated 8 March 2010, related to cases not in violation of regulations limiting families to 1 or 2 children", as follows: "Married couples in which either the husband or the wife has their own biological child, are allowed to have one or two additional children; Married couples in which both husband and wife have their own biological children are allowed to have one or more children but only in one pregnancy/delivery".<sup>8</sup>

The Action Plan for the period 2010–2015 [84] to implement Politburo Conclusion 44-KL/TW dated 1 April 2009 aimed at continuing to increase public awareness and implement perspectives, objectives, tasks and solutions of Politburo Resolution 47-NQ/TW; concentrate on resolving shortcomings, weaknesses; determine main tasks of central and local level state agencies in order to continue to promote implementation of the population and family planning policy for the period 2010–2015.

The Prime Minister decided to take December each year as "National Action Plan for Population" [85], in order to increase awareness and responsibility of the authorities at all levels, mass organizations, social organizations, each family and the whole society regarding the importance of population and family planning work for sustainable development of the country. At the same time, there is an effort to strengthen participation, collaboration of all levels, sectors and groups in society and cooperation and assistance of other countries and international organizations in population and family planning work in Vietnam.

Prime Ministerial Decision No. 612/QD-TTg, dated 6 May 2010, ensured supplementary funds to resolve compensation in the amount of 350 000 VND per year of work for population and family planning workers in communes, wards and district towns who are laid off in the restructuring.

In the field of reproductive health, the Ministry of Health has issued guiding documents including:

Ministry of Health Circular No. 29/2010/TT-BYT dated 24 May 2010, guiding implementation of some articles in Government Decree No. 88/2008/ND-CP, dated 5 August 2008, on redetermination of sex, which regulates the conditions in terms facilities, equipment and personnel in curative care facilities and the procedures for medical intervention to redetermine sex. Ministry of Health Decision No. 681/QD-BYT dated 26 February 2010

<sup>&</sup>lt;sup>8</sup> Before this document, Decree No. 20/2010/ND-CP regulated that as follows: "Couples in which either one or both spouses had their own biological child, were only allowed to have one or 2 children in a single birth".

issued materials on "Guidelines for design of forms and lists of medical equipment in reproductive health centers" at the provincial/municipal level in order to assist localities to strengthen physical facilities in a uniform manner; Ministry of Health Decision No. 4236/QD-BYT dated 02 November 2010 issued "Guidelines for assessing maternal mortality", in order to help localities improve the accuracy of statistics on maternal mortality in Vietnam; Ministry of Health Decision No. 5231/QD-BYT dated 28 December 2010 approving the materials "guiding diagnosis and treatment of obstetric complications and basic drugs for obstetric emergency care, in order to assist localities update knowledge in treatment and use of drugs for obstetric emergency care.

On 19 April 2011, the Prime Minister issued Decision No. 579/QD-TTg on approving the Vietnam human resources development strategy for the period 2011–2020. This strategy set out concrete goals, including indicators related to the health sector such as: life expectancy to reach 74 (by 2015) and 75 years (by 2020); average height of youth to reach 1.63 meters (by 2015) and 1.65 meters (by 2020); under 5 malnutrition rate to fall to below 10% (by 2015) and below 5% (by 2020).

Prime Ministerial Decision No. 641/QD-TTg dated 28 April 2011 approved the Master project for development of physical fitness and stature of Vietnamese people for the period 2011–2030. The project set out goals for 2020 that males age 18 years should reach an average height of 167 cm and females 156 cm; by 2030 males age 18 years on average should reach 168.5 cm, and females 157.5 cm. The main focus of the project is on pregnant women, newborns, infants, children, youth up to 18 years of age. The Ministry of Health will implement the first 2 programs in the Project.

### **Expectations for 2011**

- Develop and submit to the Government for approval "National Strategy on Nutrition for the period 2011–2020."
- Develop "Proposal for master plan to develop the network of curative care facilities specializing in obstetrics and pediatrics."
- Develop and issue technical professional guidelines on reproductive health such as: guidelines for neonatal units in medical facilities; guidelines for essential obstetric and newborn care; Guidelines to provide reproductive health care services to people living with HIV; Guidelines for linking HIV control services with services to prevent and treat sexually transmitted diseases and other reproductive health services; Guidelines to implement prevention of cervical cancer; Technical guidelines for artificial insemination, in vitro fertilization, etc.

## 2. Status of implementing assigned tasks

#### 2.1. Achievements

#### 2.1.1. Population and family planning

#### **Fertility**

The crude birth rate (CBR) fell from 18.6‰ (2005) to 16.9‰ (2007), 17.6‰ (2009) and reached about 17.1‰ in 2010. The reduction in CBR over the period 2006–2010 was 1.5‰, an average annual reduction of 0.3‰, thus reaching the goal set out by the National Assembly to reduce fertility by 0.25‰ annually over the period 2006–2010.

The proportion of couples giving birth to a third child has fallen rapidly from 20.8% (2005) to 18.5% (2006), 16.7% (2007), down to 16.1% (2009), and in 2010 only approximately 15.1%.

With a gradually decline in the CBR, the total fertility rate continued to fall from 2.11 children per mother (2005) down to 2.07 children (2007) and 2.03 children (2009), and it is expected that in 2010, the total fertility rate will fall to 2.01 children, thus achieving the goals set out and achieving replacement fertility.

#### Size and growth of population

In terms of population size, Vietnam ranks 13<sup>th</sup> in the world and third among ASEAN countries after Indonesia and the Philippines. In 2005, Vietnam's population reached 82.39 million people and by 2009 had grown to 85.79 million people and is estimated to have reached 86.92 million by 2010, meeting the goal of maintaining population below 89 million people by 2010.

Vietnam's population density is 259 people/ $km^2$ , placing it among the countries with the highest population density in the world (2 times higher than the average in Asia and 1.8 times the population density of China).

Average annual population growth rate during the period 1999–2009 was 1.2%, a reduction of 0.5 percentage points compared to the period 1989–1999. The growth rate of population between 1999 and 2010 was 1.05% (the goal was to maintain the growth rate below 1.14%).

#### Sex ratio at birth

The sex ratio at birth in Vietnam is currently at a high level, and continues to increase nationally, and in many localities. According to results of the Population Census, from 1979 to 1999, the sex ratio at birth grew and began to exceed the natural biological level at 107, increasing to 111 boys for every 100 girls by 2009. In recent years, this ratio is showing a strongly rising trend. Thus there is a need for appropriate drastic measures, both in terms of technology and customs and traditional practices in order to halt this increase.

#### Contraceptive prevalence rate

The contraceptive prevalence rate (CPR) of couples in reproductive ages has been maintained at a high level and continues to increase: 76.8% in 2005, 78.0% in 2006, 79% in 2007, 79.5% in 2008 and 78.0% in 2010, in which increases have been seen primarily in use of modern contraceptives: from 65.8% in 2005 rising to 68.8% in 2008 and in 2010 reaching the goal of 67.5%. The number of couples using contraceptives rose from 9.52 million in 2005 to 10.67 million in 2010. During the period 2006–2010, the average annual increase in the number of people using contraception of about 320 000 people.

#### Implementing measures to improve population quality

Some initial experimental models with promising results include:

- Model of "premarital counseling and health checks" implemented from 2003 to 2010, currently expanded to 497 communes and wards in 42 provinces throughout the country.
- Implement the project "prenatal and neonatal screening" aimed at early detection of some congenital diseases and abnormalities and genetic disabilities in order to provide professional advice and support to the parents of the child. In 2010, this project was implemented in 30 provinces, 3 prenatal and antenatal screening centers were set up

in 3 regions: in the North at the Central Obstetrics Hospital, in the central region at Hue Medical University and in the South at Tu Dzu Obstetrics Hospital; these regional centers have provided technical assistance and transfer of technology to build the prenatal and neonatal screening network in the provinces.

Trials are being undertaken for models to reduce Thalassemia incidence in Hoa Binh communities are being trialed; for detection, diagnosis and treatment of neonatal Hirschsprung disease, patent ductus arteriosus (PDA), congenital adrenal hyperplasia; Since 2008, the General Administration of Population and Family Planning has directed implementation of the model to "Improve quality of the population among some ethnic minority groups" through activities to provide health care, education, cultural activities aimed at reducing child marriage, consanguineous marriage, early and frequent childbearing among ethnic minority people in Lai Chau province. In 2010, this model was extended to 6 other provinces including: Ha Giang, Thanh Hoa, Quang Binh, Quang Tri, Binh Dinh and Gia Lai.

*Funds invested in population and family planning in the 5-year period (2006–2010* amounted to 3.625 trillion VND, including central budget 2.995 trillion VND, local budget 245 billion VND and international loans and assistance of 385 billion VND. On average each year, the state budget invests 599 billion VND, the equivalent of 7050 VND per person per year (or 0.42 USD/person/year) [86].

### 2.1.2. Reproductive health

#### Maternal health care- Safe motherhood

The proportion of pregnancies that are managed nationally reached 95% (2010), an increase of 0.4% compared to 2009, indicating an awareness and behavior of mothers has changed in a positive direction, and at the same time reflecting the positive role of health workers, especially at the grassroots levels in the reproductive health network.

In 2010, the proportion of women who received antenatal care consisting of at least 3 visits, one in each of the trimesters of pregnancy reached 81.9%. Compared to the previous proportion of women receiving 3 antenatal exams, this was a decline of 6.4% compared to 2009. However, the old indicator used before 2010 only consisted of the number of visits, while the new indicator requires that the visits be spread over 3 trimesters, and better reflects the quality aspects related to the detection and timely intervention to reduce risk factors that lead to obstetric complications and maternal mortality. The proportion of pregnant women who have received the full 2 doses of tetanus vaccine reached 94.2%, and has been maintained at high levels over many years, reducing to a minimum the number of children who have been infected with umbilical tetanus.

In 2010, the proportion of women giving birth with a trained birth attendant reached 95.7% nationally, an increase compared to 2009. The proportion who gave birth at home is estimated to have remained high in some regions such as the Northwest (35.6%), Central Highlands (~ 15%), and the Northeast (~ 12%). The proportion of mothers who have received post-natal care nationally in 2010 was 92.5%, an increase of 3.4 percentage points compared to 2009. Of particular note is the rather high proportion of women who have received postnatal care in the first week after birth (81.9%).

The rate of obstetric complications in 2010 was 2.8‰, higher by 0.6‰ compared to 2009, with an increasing trend in infection and eclampsia. The total number of deaths for each of the types of complications (except for ruptured uterus) has increased slightly.

#### Child health care

According to results of the Population Census of 1 April 2009, the infant mortality rate was 16 per 1000 live births. While the survey results indicate a higher rate than HMIS reports on infant mortality, nevertheless the goals for reduction in infant and under five mortality set out in the National Strategy for Reproductive Health to the year 2010 have all been met. In 2010, malnutrition prevention and control activities for children have continued to be implemented uniformly and comprehensively across the country. In 2010, the malnutrition rate in terms of underweight children under age 5 years fell 0.9 percentage points compared to 2009, reaching 18.0%, with reductions in all 6 regions. In 2010 the stunting rate (height for age) of children was 31.0%, a reduction of 0.9% compared to 2009, although this rate remains quite high.

#### Safe abortion services

Monitoring has indicated that the abortion procedures are being strictly implemented, and the procedures rooms are appropriately arranged, satisfying the technical professional requirements, sterile conditions, complete set of equipment, and counseling skills have been improved. In the first 9 months of 2010, there were a total of 300 251 abortions compared to 1 027 907 live births. The abortion to delivery ratio nationally is estimated in 2010 at 0.28. In the first 9 months of 2010 there were 1142 abortion complications and 3 deaths related to abortion complications. The proportion of abortions in which complications occurred was 0.48% an increase of 0.3% compared to 2009.

# Prevention and control of sexually transmitted and reproductive tract infections and HIV/AIDS, prevention of cervical cancer, prevention and treatment of infertility

*Prevention and control of sexually transmitted and reproductive tract infections and HIV/AIDS:* In the first 9 months of 2010, government health facilities provided 9 808 235 gynecological exams, with 4 293 608 of these cases leading to treatment (an increase compared to the same period in the previous year). The average number of visits per woman in reproductive ages was 0.51 per year (i.e. 1 visit for every 2 women), about the same as in 2009. The average number of women receiving treatment was 0.22 per year (i.e. 1 case treated out of about 5 women in the population), an increase of 0.02 treatments per woman compared to 2009.

*Screening and prevention of cervical cancer*: In 2010, the Maternal and Child Health department of the Ministry of Health continued to pilot activities for secondary prevention of cervical cancer, applying screening techniques consisting of gynecological exams combined with visual inspection with acetic acid (VIA). A total of 29 000 women were screened, 3.5 to 5.7% tested positive, and 40% of those testing positive received cryotherapy.

*Prevention and treatment of infertility*: By 2010, 40 out of 64 provincial reproductive health care centers<sup>9</sup> had begun screening and treatment of infertility, including 14 centers implementing intrauterine insemination (IUI).

#### Adolescent and youth reproductive health care

In 2010, the National Target Program on Reproductive Health continued to support 31 provinces to implement activities to improve reproductive health of youth and adolescents, focused on maintaining youth-friendly service provision units, as well as activities of adolescent and youth reproductive health clubs and expanding health information, education,

<sup>&</sup>lt;sup>9</sup> Hanoi has 2 Provincial Reproductive Health Centers.

communication (IEC) activities. The year 2010 was the first year in which data were gathered to determine the share of all pregnancies and abortions experienced by youth and adolescents. The proportion of all pregnancies experienced by youth were 2.9%, with some regions experiencing very high shares such as the Northeast, Mekong Delta, Northwest and Central Highlands. Adolescent abortions among all abortions nationally reached 2.2%. Regions with high shares included the South Central Coast and Mekong Delta.

#### Reproductive health care among the elderly

Fifty out of 64 provincial reproductive health centers have begun providing advising and treatment services for osteoporosis, and some centers have mobilized local funds and other legal sources to invest in equipment for detecting osteoporosis, mammography, colposcopy, etc. In 2010 62 out of 64 reproductive health centers had begun providing treatment for pre-menopause and menopausal disorders.

#### Reproductive health services for men

The health sector has begun to implement advising, examination and treatment of male reproductive health services. Because the expansion of coverage of reproductive health services to men has only just begun at provincial reproductive health centers, many difficulties are arising in terms of professional skills, lack of equipment and instruments. However, by 2010, 54 out of 64 provincial reproductive health centers had begun to provide male reproductive health services (andrology services).

#### 2.1.3. International cooperation in population and reproductive health

Vietnam continues to maintain cooperation activities with UN agencies like UNFPA, UNICEF, WHO; with bilateral agencies from countries like the Netherlands, Turkey, China, Thailand, Laos, Taiwan,...; and with other international organizations including: ADB, DKT, Pathfinder, Marie Stopes International, Jica, Program for Appropriate Technology in Health (PATH), Population Services International (PSI), USAID... in order to attract support and resources and technology for population and reproductive health services. In 2010, almost all external assistance projects in related fields had implemented effectively their annual work plans and achieved high levels of disbursements. In 2010, USAID has provided external assistance in the form of 10 million condoms to Vietnam.

Vietnam has joined as the  $25^{\text{th}}$  member of the Partners in Population and Development (PPD).

#### 2.1.4. Implementation of Millennium Development Goals (MDGs) in Vietnam

Population and family planning and safe motherhood programs have contributed to improving health of mothers and reducing maternal mortality (MDG5), and every year the family planning program has helped 900 000 mothers avoid unwanted pregnancies, which means that 900 000 women are also not facing risks related to pregnancy and childbearing, and the health sector has avoided spending on these cases and has been able to devote more resources to the 1.4–1.5 million women who undergo pregnancy and delivery, thus leading to clear reductions in maternal mortality.

Vietnam has reduced child mortality (MDG4) before the deadline and is still making great efforts to maintain these results, and in particular to prioritize reducing fertility perinatal mortality (accounting for 2/3 of all infant mortality). Vietnam has implemented effectively maternal and neonatal care, and together with successes of national programs like child malnutrition control, expanded program on immunizations, control of acute respiratory

infection and diarrheal diseases, control of malaria and dengue fever, etc., has contributed considerably to reducing infant mortality and under 5 mortality [87].

In addition, the population and reproductive health sectors have contributed indirectly to implementation of MDG 1 and 3:

- Contributions to strengthening gender equality and empowering women (MDG3): due to later pregnancy and childbearing, greater birth spacing, lower fertility and more effective care in the safe motherhood program, mothers and children are both healthier, women have better conditions for development and participation in political, economic and social activities.
- Contributions to reducing poverty (MDG1): Every year, the family planning program has contributed to reducing by 1 million the number of women giving birth, which translates into a reduction in millions of days of maternity leave and sick leave to care for sick infants, thus allowing women to contribute more to production of goods and services and reduction in poverty.

## 2.2. Difficulties and shortcomings

#### 2.2.1. Population

*Many localities have not yet reached replacement fertility*, in fact some still have high levels of fertility. By 2009, 28 out of 63 provinces had not yet reached replacement fertility (localities encompassing 34.4% of the nation's population). Some provinces still have high levels of fertility like Kon Tum with a total fertility rate (TFR) of 3.45 children and Ha Giang with a TFR of 3.08 children; and some provinces that had reached below replacement fertility have seen increases in fertility such as Da Nang that went from a TFR of 1.87 children in 2005 to 2.14 children in 2009, Dong Nai with a TFR of 1.92 rising to 2.07 children and Phu Tho with TFR rising from 2.03 to 2.19 children.

Even though replacement fertility rates have been maintained overall over the past 5 years, there is potential that crude birth rates will increase again, because of strong cultural preferences to have a son, together with the cohort of women born in the years 1985–1995 comprising the largest cohort in the history of Vietnamese demography now entering the ages 20–30, the key reproductive years.

Sex ratio at birth seeing a rapidly increasing trend, from 106 (1989 Population and Housing Census) to 107 (1999 Population and Housing Census), to 110.5 (2009 Population and Housing Census), and in 2010 is estimated at 111.2, similar to the level for China in the period 1988–1990 when China entered a period of sex imbalance at birth. Vietnam has 33 provinces with high sex ratio at birth, especially in the Northern Midlands and Mountains, Red River Delta, Central Coast, Southeast and Mekong Delta. In particular there are 9 provinces including Quang Ninh, Quang Ngai, Hai Phong, Hoa Binh, Nam Dinh, Bac Giang, Bac Ninh, Hai Duong and Hung Yen which have seen major increases in the sex ratio at birth, up to 115 to 130. Analysis of sex imbalance at birth through 2009 Census data suggests that sex ratios are highest in the more educated and richer groups, and in the North it is higher in rural than urban areas while in the South, it is higher in rural than urban areas. The sex ratio at birth began to increase rapidly starting in 2006, but because of an inability to forecast trends, and lack of experience no effective methods to control this tendency have yet been put in place. With the current momentum, there is a risk that this ratio could rise to 120 by 2020. Draft Population and Reproductive Health Strategy for the period 2011-2020 has proposed goals and measures to resolve this situation.

**Population quality has been slow to improve**: Vietnam still belongs to the group of countries with an average human development index (HDI). Healthy life expectancy only reaches 66 years, and is ranked 116 out of 182 countries in the world in 2009 [88]. The child malnutrition rate remains high, especially the stunting rate which was 31.0% in 2009. Physical fitness of Vietnamese youth has not yet been improved. Vietnam's population is aging rather rapidly because of rapid reductions in mortality rates, and increasing life expectancy, in 2009 the proportion of the population aged 65 and older was 6.6%, and the aging index was 35.7%, higher than the average for Southeast Asia (30%).

#### Information, data are not precise and do not yet satisfy the need for management

Information and data on population and family planning are still not precise, are incomplete, not received in a timely manner; different sources of data indicate great discrepancies. Analysis, processing, forecasting and supplying information and data on population and family planning do not yet meet the requirements for management and the integration of population variables into planning and policy-making for socio-economic development of each sector and each locality.

#### Physical facilities and means for implementing tasks do not yet meet need

Most physical facilities and equipment and other means of work of the communication and counseling centers and the databases on population and family planning in provinces, districts do not yet satisfy the functions and responsibilities. Some 43 out of 63 provinces (accounting for 68% of the total) and 450 out of 697 districts (65%) have received investment prior to 2000, and at the same time cyclones, floods, and other weather conditions have led to deterioration in facilities. So there is a great need for investment in upgrading and improvements in 20 out of 63 provincial facilities (accounting for 32%), and in 200 out of 697 district facilities (29%) that have currently only been allocated a temporary facility or joint facility, but with a working area that is too small; or in some cases there is a need to rent a facility to use [86].

#### 2.2.2. Reproductive health

While the general level of maternal and child health in Vietnam is relatively good, there remains a considerable gap in the health care and maternal and child health indicators between urban and rural areas and between regions [87]. In particular:

- Access to and quality of maternal health care before, during and after delivery, and neonatal care face many limitations and in mountainous areas many women still give birth without a trained attendant.
- Disparities in maternal mortality between mountainous and delta regions, while they have declined compared to 2002, yet the gap remains at about 3 times according to the 2009 National Survey of Maternal and Neonatal Mortality).
- Annual reductions in child malnutrition in disadvantaged areas are still slow and the proportion of children who are malnourished remains high compared to delta and urban areas. The double burden of malnutrition (high rates of child under nutrition combined with rising trends in overweight and obesity). The pace of reduction in malnutrition rates is slowing down.
- Reproductive tract and sexually transmitted infections are widespread, examinations for screening, prevention and treatment and the linking of reproductive health services with control of reproductive tract and sexually transmitted diseases and HIV/AIDS have not yet been paid adequate attention.

- Screening and early detection of reproductive tract infections (cervical, breast, prostate) have not yet been implemented widely.
- Problems of reproductive and sexual health in specific sub-groups of the population: youth, adolescents, migrants, workers in industrial zones, the elderly and men, have not yet been paid adequate attention and inadequate resources have been mobilized for implementation of appropriate programs.
- Budget investments have not yet satisfied the increasing needs and demand of the population for reproductive health services.

# 2.2.3. Reproductive health service network, including clinical services and family planning

#### Organization

By 2010, 24.6% of all districts had not yet applied the model of reproductive health department within the district preventive medicine centers; 18.2% of provincial hospitals and 43.2% of district hospitals had not yet set up neonatal units according to Ministry of Health Directive No. 04/CT-BYT dated 10 October 2003.

#### Human resources

Provincial reproductive health care centers still face shortages of pediatricians (63% of centers), the ratio of pediatricians to obstetricians is 1: 3.3, and there is a shortage of paraclinical and diagnostic imaging specialists, thus there will be continued difficulties in improving quality of child health care and paraclinical technical services.

At district hospitals the ratio of pediatricians to obstetricians is 1:2.13, in the Northwest and Central Highlands, the 2 regions with the lowest number of specialist pediatricians and obstetricians (obstetricians account for 19.1% and 20.5% of all doctors in the Northwest and Central Highlands respectively; pediatricians account for 3.7% and 7.5% of all doctors respectively). It is worth noting that the reproductive health department of the district hospital, the proportion of pediatricians is very low, the ratio of pediatricians to obstetricians is only 1:4.9, especially in the North Central Coast and the Mekong Delta, where currently there are no pediatricians working in the reproductive health department at the district level. Currently only 6.3% of commune health stations do not yet have secondary school trained midwives or obstetric-pediatric assistant doctors.

#### Capacity to deliver reproductive health and family planning services

Almost all provincial reproductive health centers are implementing reproductive health services according to the referral system as regulated by the Ministry of Health, yet by 2010, there were still 27 reproductive health centers that lacked conditions and ability to implement male sterilization (42% of the total), and 29 centers that lacked the ability to provide female sterilization services (45% of the total).

At the district level, some 31.8% of district hospitals are not able to perform C-sections, 46.1% are not able to perform partial hysterectomies and 35% are not able to perform emergency cases of ectopic pregnancy, while 40.2% of district hospitals have not yet organized the provision of blood transfusions at the district level.

The commune level has implemented almost all technical professional tasks related to reproductive health and family planning, however there remain 25.5% of all communes that cannot monitor labor using the partogram and 25.6% of communes cannot yet implement active management of the  $3^{rd}$  stage of labor to prevent post-partum hemorrhage. For

pediatrics some 31.8% of communes do not yet implement integrated management of child illness and 38.1% of communes do not provide vitamin  $K_1$  injections for newborns.

The working facilities of many reproductive health centers face many difficulties and cannot yet fulfill the tasks assigned. The organization of the district level in some provinces is still not stabilized, creating some uncertainty among the staff. The health workers working in reproductive health are insufficient in number and limited in their professional skills, especially at the district and commune levels [89].

## **Chapter 8: Health System Governance**

### 1. Updates on major policies

The 11th party congress document (2011) has reaffirmed to continue completing the state apparatus, creating strong developments in administrative reform, strengthening capacity in state governance, reinforcing the socialist legislation with strict disciplines and rules. The 11th party congress document also reassured the state mission is to care, serve and protect legitimate rights and benefits for all citizens.

On organizational structure of the Ministry of Health, the Government issued Decree No.22/2010/ND-CP on amendment and supplement to Article 3 of Decree No. 188/2007/ND-CP dated 27 December 2007 regulating functions, tasks and power and structure of the Ministry of Health. By which, the organization structure of preventive medicine is subdivided into small units: The Department of health environment management was established, the Department of Preventive Medicine and Environment has been renamed after the Department of Preventive Medicine.

The five-year health sector plan 2011–2015 was issued and referred to health governance such as improving capacity in policy development, giving resource priority to the Ministry of Health in strengthening policy-making capacity, supplement and accomplish policy and law related to health; strengthen participation of stake-holders in policy planning; strengthen, consolidate health inspection network; strengthen decentralization and intersectoral collaboration, and strengthen linkages between preventive medicine and curative care.

#### 2. Status of implementing assigned tasks

In implementing set tasks, including JAHR 2010 recommendations, the health system governance has *obtained some improvement*.

*On policy development*, developed and implemented five-year health sector plan and draft strategy for the protection, care and improvement of people's health, and master plan for health system development for 2011–2020 and vision to 2030, and policies, strategies of specific spheres.

Health legislation is continued completed. Many laws have been issued covering all spheres of the health sector, including important documents such as the Law on Examination and Treatment (No.40/2009/QH12); Law on Food Safety (Law No.55/2010/QH12), Law on Infectious Disease Control (Law on 03/2007/QH12). Guiding circular to implement the Law on Health Insurance has been prepared and timely issued. However, guiding circular to implement the Law on Examination and Treatment, the Law on Food Safety and Decree on reforming operation mechanism and financing methods in public health institutions are under development. The draft national strategy for nutrition during 2011 - 2010 and vision 2030 is also under development.

Quality of health planning work is improved through the preparation of annual health joint review (JAHR) with extensive consultations with experts and stakeholders and getting better. In 2010, the Ministry of Health conducted a Joint Assessment of National Strategy (JANS) using assessment tools of IHP+ (International Health Partnership and related initiatives). Some research institutes involved in the assessment and consultancy, providing evidence for policy making although their full potentials and efficiency have not been brought in full play.

There is considerable improvement in strengthened dialogues, policy advocacy and influence (success in resource mobilization of financing to upgrade the grassroots health care network), incentives for health workers and health staff.

Mechanism, implementing tools and policy implementation continue to be completed. Streamlining of administrative procedures within the management scope of the Ministry of Health has been approved. A evaluation of Circular for establishing health insurance division at provincial health department was carried out. The Ministry of Health issued Circular No. 17/2009 guiding detailed instructions for check, inspection and solving complaint, denouncement of head of health care agency. Draft Decree on administrative penalties in health insurance, preventive medicine, environment and HIV/AIDS control, health examination and treatment, drugs, cosmetics and medical equipment was developed and submitted to competent authority for approval.

In addition, implementation of tasks in health system governance is faced with huge difficulties and limitations. Firstly, direct involvement degree of the Ministry of Health on day-to-day management of health service provision facilities remained unchanged over the past 2 year. In 2003, the Ministry of Health held accountable for direct management of 49 subordinate units (Under Governmental Decree No. 49/2003/ND-CP); by November, 2009, the number of units under direct control of the Ministry of Health is 73 (Under Prime Ministerial Decision No.1874/QD-TTg), including many units that are direct medical service providers.

There are few comprehensive studies and analyses of impact assessment of new factors such as epidemiological transition, grassroots health network in the current socioeconomic context, trends in private sector development to provide reliable and convincing evidence for policy development work.

To date, the role of research and consultancy institutions in scientific research, surveys to provide evidence for policy development and adjustment remains very limited. At the national scale, there is only one specialized research institute for health policy and strategy (Health Strategy and Policy Institute); other research units on health policy and health systems at universities or research institutes are also limited. Therefore, research on health policy is being done by departments of the Ministry of Health.

The extent of participation of civil society organizations and professional associations in the development, monitoring and supervision of policy implementation is limited, due to a lack of a mechanism and conditions for its organization and a lack of necessary legal regulations.

# PART II: HEALTH CARE FINANCING

## **Chapter 9.1: Health Financing Reform**

Health financing is an important component of the health care system with a function of *mobilizing sufficient resources* for the health system to operate, sharing risks so that *people can access health care services when they need*, and *effectively use available resources* for health. Thus, health financing mechanism reform must target at making the health system more dynamic and effective. In other words, health financing reform aims at mobilizing more sources, and more effectively using the resources and bringing more benefits and better health care quality for the people.

Reforms of the financing and operational mechanisms in the health sector are among the top priorities of the health sector for the period 2011–2012, aimed at effectively implementing the path and the policies of the Party and the Government, and at the same time effectively implementing the Five year health sector plan 2011–2015. Therefore, this topic was selected for greater attention in the JAHR 2011.

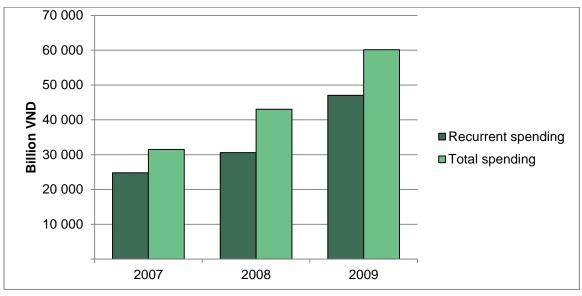
This chapter will analyze the current situation of health financing distribution and use in Vietnam, results, progress and difficulties, challenges, from which responding priority issues and recommendations will be proposed.

## **1. Current situation**

## 1.1. Results and progress<sup>10</sup>

After the issuing of Politburo Resolution 46-NQ/TW, on 23 February 2005, investment in health has increased considerably. In 2007, health spending was 31 841 billion VND, in 2009 it was 60 135 billion VND, which is nearly doubled after 3 years (Figure 6).





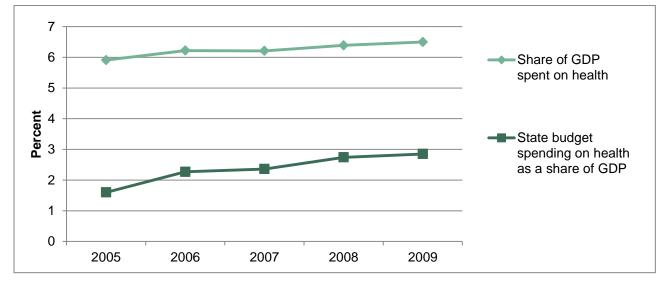
Source: Health statistical yearbook, 2009, the Ministry of Health

The proportion of health spending as a share of GDP, and health spending using the state budget per total state budget expenditure has increased considerably over the past years (Figure 7). In 2005, health spending from the state budget was 5.22% of total state budget

<sup>&</sup>lt;sup>10</sup> See more in Chapter 4., section 2.1.

spending, in 2009, it was 8.2%. Rapid increase in the state budget for health in recent years could be attributed to the fact that the Government started big investments in district general hospital and provincial hospitals through the government bonds to implement Resolution No. 18/2008/QH12 of the National Assembly. The Government also increase budget to subsidize purchase of health insurance for the poor and children under age six years to implement the Law on Health Insurance (effective since 1 July 2009). To achieve and maintain a steady proportion of state budget for health at more than 10% of total state expenditure, much more effort will be made by the Government and the Ministry of Health because the government bonds will be phased out.





Source: Health statistical yearbook, 2009, the Ministry of Health

Due to strongly increasing investments from the state budget over the past 5 years, especially from funds mobilized through sales of government bonds, the public share of total health spending has seen a substantial increase. In 2005, the public share of total health spending was less than 30%, but by 2009 it had risen to 45% (Figure 8).

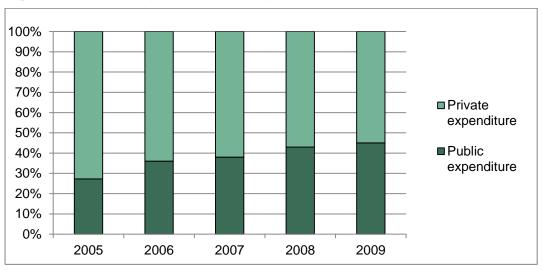


Figure 8: Public and private health expenditures, 2005–2009

Source: National Health Accounts 2010, the Ministry of Health

#### 1.2. Difficulties and challenges

Currently health financing faces many difficulties and challenges that have not yet been resolved. One of the biggest barriers leading to reform difficulties is to identify basic health care services in the current political and economic context of Vietnam. Presently, there are many different perspectives on health care services, namely: health service is a kind of public service fully or partially subsidized by the state, or is a special commodity thus it requires very special mechanism, or health service is regarded as other goods? Inconsistent viewpoints lead to vague understanding like the current service price is heavily subsidized, but unable to which agency will "subsidize" for that part; whether health facilities be subsidized its recurrent costs by the state budget or they have to "manage by themselves" under the market mechanism... Those hassles have negatively affected health financing development and health care cause.

In Vietnam, the health financing mechanism has been slow to reform compared to general social development, resulting in stagnation and development in undesirable ways. The consequence is that health financing system has not been assessed highly in many aspects, such as the private share of total health spending and the out-of-pocket share of total health spending remaining too high; the fee-for-service payment mechanism is still predominant and health care costs are not being controlled; "under-the-table payments" are still widespread at health facilities; overuse of lab tests is prevalent at both public and private facilities, etc. Those problems indicate that if the health financing mechanism is slow to be reformed, it will entail negative impacts and consequences for the people and society.

Major impediments and challenges for health financing in Vietnam are resource constraints, irrational distribution mechanism and ineffective use of resources.

#### 1.2.1. Resource constraints and irrational distribution of financing

#### Public share of health spending is still low

Public spending on health includes funds from the state budget, social health insurance and external assistance (ODA, NGO). According to the World Health Organization, to ensure equity in health care, the public share of total health spending should reach at least 50%. In recent years, the public share of health spending in Vietnam has increased (from 30% in 2005 to 45% in 2009), but still remains below 50%.

Although the state budget allocated to health has increased over time, the share of state budget spent on health remains low. By 2009, the proportion of health expense accounted for 10.3% of total state budget spending (if we include investment spending and spending from government bond revenues for the health sector), yet this is still inadequate to meet need for investment in the health sector. In the coming years, even if this amount increases, it will still be inadequate to meet investment needs, moreover this share cannot increase forever, especially as inflation increases, the state cuts back public spending, spending from government bond funds diminishes. This indicates that if mobilization of financing for health relies on the state budget, it will lag behind development and social needs. Therefore, in order to increase the public share of health spending, rapid development of health insurance is needed. In addition, the urgency of comprehensively reforming the health financing mechanism is apparent, only in this way health financing could mobilize more resources for investment in the future.

#### Effectiveness of transforming support from the state budget

In Vietnam's health expenditures, the state budget spending on health is primarily direct investments in health facilities. From 2002 to the present, a considerable portion of state spending was earmarked to support the health care fund for the poor (Decision 139) and purchase insurance cards for the poor. Other target groups are also supported by the state budget, e.g., support to purchase health insurance card for children under-six, the old-aged people at 85 years and beyond... That using part of the state budget to directly purchase health insurance for the people is an important milestone in the mindset and practicality of health financing: shifting part of the investment in health facilities to direct support for patients.

However, the shifting of state budget subsidy to directly support patients is revealing some limitations. After the birth of Decision No. 139/2002/QD-TTg, the poor have more opportunities to use health care services, access to health facilities is substantially improved. Some poor people could access and use health services in their provinces and at central level. However, most of them are still mainly relying on grassroots level health services. In implementation of health care fund for the poor, some provinces are unable to use up the funds, most of them are mountainous. For example, during the period 2006–2009, while health insurance fund of Vietnam was always in deficit status, Bac Kan health insurance fund in 2006 had a mark-up of 1.8 billion VND, in 2007 it was 4.4 billion VND, in 2008 it was 11.6 billion and in 2009 it was 14.6 billion VND [90]. Although the poor are subsidized for health care costs, they are still faced with difficulties when seeking care due to indirect costs (travel, food, lodging, care takers...).

Besides, according to the Law on Health Insurance, the state budget was used to support the near poor at least 50% of the premium. To date, only 10% of the near poor are covered (with the exception of some provinces in the Mekong River Delta and the North Central Coast with ODA loan projects from the World Bank providing additional subsidies where the proportion of the near poor with health insurance is substantially higher). Besides that, other compulsory categories of health insurance such as children under 6, the elderly... also has low coverage of less than 100%. The could be blamed for many reasons, including mechanism, policy and collaboration between relevant sectors and awareness of the people [91]... The state budget earmarked to purchase health insurance for these beneficiaries has not been fully spent. So, to date, there is not yet appropriate solution to use well the state budget to subsidize the near poor and other social welfare policy beneficiaries.

#### Health financing for preventive medicine is meeting some difficulties

The current budget allocation for preventive medicine is facing substantial troubles. It is very difficult to separate spending for preventive medicine as this sphere covers many different activities, funding sources and expenditure items. Currently, budget allocation for preventive medicine is provided through many sources, direct disbursement for health facilities or through the national target programs, projects ... Therefore, correct and sufficient financing for preventive medicine as pointed out by the Resolution No. 18 of the 12th National Assembly sessions remains very complicated.

Granting of autonomy to preventive medicine units according to Decree No. 43/2006/ND-CP has revealed some irrationalities and has not proven effective. Preventive medicine unit has their own typical characteristics as most of the activities aim to serve community and epidemic control; direct revenue from household payment for preventive services is very limited. Therefore, when applying Decree No. 43 to preventive medicine units, it will lead up to a paradox that is "the more actively they work, the less income and savings they get". Almost all preventive medicine units understand to save recurrent expenditures such as electricity, water supply, petrol, etc.... However, if they want to save

petrol cost, they have to cut down community visits thus their professional work is not fully done, and leading to ineffective performance.

Indeed, financing distribution mechanism for preventive medicine units, and application of Decree No. 43/2006/ND-CP to these agencies reveal substantial hassles, affecting technical performance. This situation poses an urgent need to reform the health care financing mechanism.

#### Allocation of state budget funds to hospitals needs to be reformed

Currently, the state budget allocation for hospitals mainly relies on the class of each hospital and number of beds. This average budget allocation has been done for a long time and remains until today. It is truly irrational as budget allocation only relies on administrative indicators such as number of beds or staff, not performance of the hospitals. So, they may lead to the fact that some hospitals run well, attract more patients but get similar budget allocation to other facilities that have poor performance, fewer patients if they both have the same beds and hospital standard. Such an inappropriate budget allocation mechanism will lead to a situation in which some hospitals focusing on increasing patient beds rather than technical development because it is more difficult to get money if they improve their performance than increasing number of patient beds.

The current state budget allocation for hospitals is irrational in a sense that it creates an "adverse subsidy". Currently, the highest level hospitals get the biggest budget depending on the number of beds, and lower facilities receive less budget. Such a budget allocation could be explained that higher level facilities treat more complicated cases thus they require more equipment and more highly qualified staff ... than lower levels. However, if we look at accessibility to health care services, there is a much smaller proportion of poor patients seeking care at high level facilities than the rich. Indeed, this budget allocation could even lead to `reverse subsidies' in which more of the state budget is allocated to serve higher income groups. Limited state budget allocation for district hospitals is one of the reasons that motivates people to seldom use lower level hospitals. This reality requires a need to reform the financial allocation mechanism to be more appropriate for hospitals, and to encourage people to use services at the lower level, reducing the `reverse subsidies' for the rich.

#### 1.2.2. Effective use of financial sources is limited

Beside difficulties such as resource constraint, irrational budget allocation, efficiency in financial resource use exhibits many problems.

#### Medical costs are hard to control

Since the issuance of Governmental Decree No. 95-CP on partial collection of hospital user fees in 1994, there has been no official change in the user fee policy evident in written policy documents. After 16 years, the fee schedule since 1994 is still applicable, and revealing irrationalities compared with social living costs. As revenue from user fees is not sufficient to make up for medical service costs, so in order to exist in the market economy, hospitals and health facilities have to apply various measures to increase income and pay for the loss. This leads up to other consequences such as service costs for some hospital services rising out of control, including drug and lab test overuse (as reported by the World Health Report 2010, the waste accounts for 40% of health care costs). Although there are not yet effective tools or measures to assess pharmaceutical and lab test overprescription, results from market surveys indicate that this phenomenon is present in many public facilities, especially private facilities. Studies on autonomy under Government Decree No. 43 [92] show that there is a risk of abuse, increased indications of taking tests and high-tech services

in some hospitals; proportion of patients taking magnetic resonance indication (MRI) and CT-scanner increase over years, 20% of doctor respondents said that there is a risk of test abuse. At central hospitals, outpatient treatment costs of insured patients increase by 1.2–2.6 times in 2008 over 2005; inpatient treatment costs increase by 1.1–2.8 times.

Therefore, irrationalities in regulations that set user fees too low has led to many negative consequences, including a situation in which it is difficult to control medical costs and provision of health services at hospitals. This situation urgently raises a need for comprehensive changes in fee schedule and financing mechanism.

#### State management has not yet brought about high efficiency

The state management role for health financing has not really brought about efficiency. Due to frequent changes in organization structure of the health system leading to to-and-fro changes in financing and health financial management between health agencies and authorities, and vice-versa. The state management role in health service price is restricted to the degree that competent authorities approve service price as proposed by hospitals and health facilities. Ineffective state management is apparent in the inability to control medical service costs and provision, in the orientation and encouragement for development of services that should be promoted because they bring benefits to the community and limiting those services that should not be developed.

#### Health financing mechanism provides little incentive for health workers to work

The current financing mechanism has revealed many problems not only for patients but health facilities and health workers. The financing mechanism fails to generate incentives for staff to effectively do their job as reflected in some aspects. Firstly, service price and direct stipend for health workers are too low while their work nature requires high greymatters and energy with obvious dangers and risks... so it discourages health workers to devote for their work. Secondly, the financial allocation mechanism is too egalitarian as it is simply based on input indicators (number of beds, number of staff...), therefore it doesn't encourage health workers to work actively, to increase their productivity. This inappropriate mechanism is contributing to the shifts of workers from rural to urban areas, and from lower to higher level facilities, from public to private facilities.

#### Autonomization in hospital lead to some unwanted impacts

Besides the positive aspects of the policy to grant hospitals and health facilities autonomy, there have also been some undesirable negative effects. Health care service is a special commodity that does not follow any market rule, however hospitals are given autonomy and operate entirely according to market mechanism. This has revealed irrationalities in the implementation of the autonomy policy in practice. Autonomous hospitals did not calculate full costs in the service price thus leading to insufficient resources and generating the intension to maximize revenue. Bed occupancy rate keeps rising over years which make the hospital overcrowded, reducing quality of care and increasing health care costs.

Autonomization of hospital induces abuse of services, increasing indications of paraclinical tests and high-tech services, thus increasing treatment costs. On the other hand, autonomization of hospital is very limited at district level, especially in disadvantaged regions as there is little possibility of increasing revenues from charging patients. Indeed, hospital autonomization has made already fragmented problems of district hospital become more serious. This fact reveals that it is impossible to apply one-size-fit-all model of hospital autonomy but requires more flexible and appropriate financing mechanism for each group of hospitals. So, the need for comprehensive reform of health financing has emerged urgency for the health sector.

## 2. Priority issues

- Although public health spending has been increasing over time, the public share of health spending is still below 50% of total health spending, the minimum level needed to be able to ensure health equity.
- No reform in budget allocation for preventive medicine sphere is undertaken therefore implementation of the National Assembly Resolution No. 18 remains confusing. Giving autonomy by Decree No. 43/CP for preventive medicine units has not yet brought about expected results.
- The state budget allocation for hospital remains egalitarian, based on input indicators (number of beds, number of staff), and is not related to performance so it does not encourage effective use of health financing resources.
- The low use of lower level hospital services as people bypass these facilities has led to overcrowding of higher level hospitals.
- Costs of hospital services are increasing out of control, including importantly the problem of overuse of pharmaceuticals, lab tests and prolonging length of stay unnecessarily.
- The state budget allocated for subsidizing the near poor and other social policy beneficiaries to purchase health insurance has hardly been used.
- The health financing system has not yet created adequate incentives for the health workers to work effectively

## 3. Recommendations

In order to gradually resolve the priority problems noted above, the report has made recommendations for the following groups of policy measures (for details see Chapter 12):

- Increase public spending for health through increasing state budget spending and health insurance coverage.
- Reform state budget allocation and increase state budget spending in order to increase resources for preventive medicine.
- Implement effectively a shift from direct subsidies to service providers to subsidies through users of services, combined with full and correct costing of health services.
- Reform the health financing mechanism to create incentives for better performance by health workers.
- Strengthen state management of health financing.

## **Chapter 9.2: Reform of Provider Payments**

Health care financing reform, especially provider payment reform is considered an important solution to strengthen use of resources and one of the priority issues on the health policy agenda. This chapter provides an overview of currently used payment methods, problem analysis, selection of priority issues, and proposal of appropriate measures to improve provider payment methods for curative care services in the coming years.

#### 1. Concepts

The provider payment method for health care services is not simply a reimbursement of costs to a health care provider. Each payment method entails different incentives that affect service provision and utilization behavior and health care costs. Thus, provider payment methods can have an important influence on equity and efficiency in the health system and are regarded as one of five `control knobs' of the health care system [93].

The section below provides an overview of the advantages and disadvantages of various payment methods, including methods currently applied in Vietnam and other methods used in different health care systems. They are summarized in Table 5.

#### Budget allocation according to expenditure item

State budget funds (from taxes) allocated to public service providers (including hospitals and health care facilities) according to fixed norms is a typical example of inputbased budget provision. This financing method focuses on input costs with pre-determined norms, and usually entails various expected output requirements.

Input-based financing is characterized by items of expenditure and allocation norms set by government agencies. According to this method, payment for major items (such as salary, operations and maintenance of buildings and equipment) is stable and fixed. For curative care facilities, this budget is usually allocated according to the number of beds, the number of permanent staff in each hospital, with some adjustment coefficients by type (specialty), standard and level of hospital.

This payment method has the advantage of being simple and easy to apply. Financing plan usually relies on budget availability or requests for funding from previous years, with some adjustments for inflation (usually increase of 10%-15%).

However, the input-based financing method has given rise to some basic limitations because of the lack of incentives for efficient use of resources, or orientation to improve quality of services. Use of budget is linked to expenditure levels and norms according to regulations. Each unit that receives budget is permitted little flexibility to operate for greater facility productivity or performance. When the budget is allocated according to norms for inputs (number of beds, number of staff), problems related to orientation towards equity or efficiency are difficult to resolve, because more resources are allocated towards better off areas with greater capacity to disburse funds (for example, urban health care providers have greater concentrations of beds and personnel). Currently there is not yet a minimum state budget allocation norm per bed. Therefore, there are relatively large differences between localities in the amount of the state budget allocation per bed, with some provinces allocating 50–60 million VND per bed per year at the province level, while other provinces can only allocate about 30 million VND.

In addition, some opinions have been raised stating that state budget allocation in this manner leads to untargeted use of subsidies, because all people (rich or poor) when they use hospital services will benefit from health services partially subsidized by the Government (for example: infrastructure investments, medical equipment investments, staff training investments, part of salary paid from the state budget and not included in service fees).

#### **Fee-for-service**

With fee-for-service payment, costs of services are reimbursed on the basis of each single unit of service, i.e. if a patient uses a service or input, he will be charged for that service or input, (the patient pays directly or health insurance pays on behalf of the patient). The level of fees is proposed by the health care facility, is considered and approved by government authorities.

Fee-for-service payment has some strengths. It leads medical facilities to strengthen service provision to increase revenues, and in this way it promotes development of operational capacity of the hospital and of the entire health system. This advantage can be understood in a positive light if it is used to encourage primary health care, preventive medicine, prevention of epidemics, and control of diseases with potential to negatively affect the whole community like mental illness, tuberculosis, leprosy, etc. Another strength of this payment method is that patients perceive it as fair, because whoever uses a service pays for that services, and not `equal' payments by all such as is found in the DRG. However, in general fee-for-service payments are considered an out-dated method with many negative effects. Almost all developed countries currently have abandoned this payment mechanism

The most negative effect of this payment mechanism is the encouragement of service provision above the level that is needed because of the profit motive, this is also known as abuse of services. Medical services have many features that are very different compared to other basic social services. With medical services, patients do not know in advance when they will need them, and they don't know in advance how much they'll have to pay. There is little information on what services they will need to use (as this is mainly determined by the practitioner). Patients rarely can bargain the price of medical services, and seldom have information to assess with any accuracy what the total costs will be and what the quality of services will be, etc. Therefore, the services required by the patient are primarily determined by the doctor (provider). In this mechanism, hospitals have the tendency to increase service provision (especially laboratory testing and diagnostic imaging) in order to increase revenues of the hospital. This feature has led to the situation of widespread abuse of services in hospitals, both public and private. Abuse of services appears in many forms, including: (i) abuse of lab tests (requesting many tests, including unnecessary ones; repeating lab tests many times, not recognizing test results from other facilities as legitimate even for hospitals of the same level; (ii) abuse of pharmaceuticals (combining too many drugs in treatment in a way that is unnecessary; (iii) admitting even slightly ill patients who could have received treatment at lower levels; (iv) prolonging treatment duration, etc.

Abuse of services causes treatment cost escalation for patients and affects the health insurance fund and overall social costs of health care in general. The fee-for-service mechanism, if it is implemented in an environment where social mobilization is being promoted (i.e. when private facilities are investing in equipment at public hospitals), the autonomy mechanism and limited and ineffective regulation and checking, then the effect will be increased abuse of services and increased costs.

In order to implement this mechanism, management agencies must estimate the price for thousands of specific services (about 3000 services). Costs are linked to prices and prices are subject to regular fluctuations, so estimating costs and updating prices of thousands of services is very difficult and expensive.

Overhead and administrative costs of the fee-for-service mechanism are high for both the hospital and for service users, because of detailed financial and accounting procedures for thousands of individual services. Therefore, it is very difficult to implement effectively the checking and surveillance to ensure quality of services and patient rights, especially in the conditions that the health insurance claims processors are in short supply and lack professionalism.

With this provider payment mechanism, hospitals mainly focus on curative care in order to generate revenues for the hospital and for the staff, they seldom pay attention to preventive medicine, community health, mentoring of lower level facilities and research.

With the above weaknesses, almost all developed countries no longer use fee-forservice payments, they have shifted to other payment mechanisms (such as capitation, package payments or diagnostic related groups –DRG systems).

#### Per day payments

With the per day payment method, health care providers are paid a fixed amount per day spent as an inpatient in the hospital. This is a simple payment method, easy to apply under conditions where the management information systems and management capacity are limited.

Under conditions of some specific socio-economic conditions or with specific goals desired to be encouraged (for example to motivate health facilities in mountainous, remote areas without adequate medical staff), this payment mechanism could be applied to encourage medical service providers to provide more services to patients.

However, this payment mechanism currently is rarely used because it leads to strengthening in areas where it is not needed and leads to prolonged treatment length of stay which lead to unreasonable increases in costs.

#### Package payments and diagnostic related group (DRG) payments

Package payments and diagnostic-related group (DRG or case mix) payment mechanisms operate on the basis of paying a fixed amount for the entire course of treatment, not according to each individual diagnostic or intervention service and drug actually used by the patient. Package costs are calculated to include all necessary services for a specific disease covering the entire time from when the patient is admitted to the hospital until they are discharged. The basic logic of this payment mechanism is to calculate the average cost for a diagnostic related group (DRG), that is a specific disease or group of similar diseases. In order to implement this method, the following steps are needed:

(i) Determine the diseases or group of diseases for which a package price will be charged: Initially this can be done for a limited number of conditions, gradually expanded to cover other diseases and evolve eventually towards application for all diseases (DRG). Selection of specific diseases needs to be based on the following criteria: high proportion of cases admitted for inpatient care (to increase efficiency in applying package prices); diseases that have clear diagnostic standards and treatment protocols. Estimates indicate that with careful selection of diseases, one only needs 50 common conditions to cover 70% of all admissions to hospitals.

DRG payments is simply package payments that apply for all diseases or diagnostic groups. With DRG, all diseases are categorized into groups with diagnostic standards and costs similar to each other. With hundreds of thousands of different diseases, different countries categorize diagnostic groups in different ways, with about 600–800 diagnostic groups. Average costs are estimated per patient within the diagnostic group. It is important to note that the DRG system is not a set of prices, but rather a set of coefficients indicating the relative cost of treating one case in each diagnostic group in relation to the average cost of all inpatient cases.

(ii) Develop care pathways: After determining the categories of diseases and diagnostic groups, the next step is to develop care pathways for the examination, diagnosis and treatment of patients with each disease or diagnostic group. The main objective of developing care pathways is to improve quality of examination and treatment, at the same time these pathways serve as a basis for estimating average costs of treatment for each disease or diagnostic group. The development of care pathways can be used to adjust estimates of average treatment costs. Care pathways must be in line with medical progress, but must also fit with the actual ability to treat patients at the health facility. It is important to avoid the situation of developing care pathways with standards that are too high compared to the ability to provide the services, or that lead to increased costs of care. Care pathways are developed based on the most common cases. Once average costs are estimated from patient billing systems, they can be adjusted based on contents of the care pathways.

In terms of professional standards, pathways are intended to inform and recommend a standard treatment path and NOT to oblige the practitioner to follow the treatment precisely as stated in the care pathway. Through analysis of actual care compared to the pathway that indicates a large number of variances requires further checking and consideration of adjustments to the pathway or adjustments to how care is provided.

(iii) Determine average costs of examination and treatment for each disease and diagnostic group: On the basis of existing hospital invoicing databases linked with disease and procedure codes, accounting or finance experts can calculate average charges for the examination, diagnosis and treatment of each disease or diagnostic group. While clinical reality is that each patient has a different physical condition, or clinical manifestation of the disease, so treatment will have to vary. However, the package price or DRG systems pay based on average costs, with the idea that the slight cases compensate for the more severe cases. Cost categories include human resource costs (salary, bonuses, allowances, training,...), direct costs (drugs, blood, IVs, medical consumables), costs of initial investment in physical facility, medical equipment, depreciation costs, etc. These costs are calculated based on the database, but may include adjustments to ensure full and accurate estimates, ensuring inclusion of cost items not covered in the invoicing database, and adjustments based on care pathways.

*(iv) Determining the amount to collect:* On the basis of average total costs, the price to charge should be set on the basis of ensuring full payment of costs of providing the service, along with a percentage for reinvestment, upgrading and developing the medical facility. Costs subsidized by the state budget should not be calculated in the price. The remaining costs should be fully incorporated into the charges to be paid by health insurance or patients or other source of funding (Health care fund for the poor, charity funds, etc.).

For implementation, this provider payment mechanism can be designed initially in a simple way, with from 10–20 diseases gradually increasing to 50 common conditions; after that gradually becoming more complicated according to the goals and capacity for developing the health system, eventually reaching from 600–800 diagnostic groups (DRGs). At the

overall system level, this provider payment mechanism will gradually be applied in provider payments, budget planning, budget allocation for curative care based on total amount and level of complexity of patients seeing care and the professional capacity of each hospital. Currently there are about 30 developed countries in the world who have applied DRG.

The main strengths of package pricing and DRG systems are as follows:

(i) Incentives to providers to economize, strengthen efficiency of activities, improve quality of treatment (to speed up recovery and reduce costs of prolonged treatment), improving treatment process, applying new technologies to reduce costs and improve quality of services.

(ii) Budget planning and activity planning of health facilities will be more pro-active. Information on costs of treatment for each disease allows hospitals to have plans to actively set up the activities of the hospital and related services.

Service information and cost estimates developed in this payment system serve as the basis for measuring results and assessing performance of health care service providers. The DRG system database is also often used in budget planning for curative care.

(iii) The amount of prospective payment along with clear regulations will create more equal conditions for health care providers, both public and private, in the medical service market, and this will create the incentive for private health facilities to participate more actively in health insurance.

(iv) This provider payment system contributes to reducing length of stay. In Australia, historically fee-for-service payments were used (as in Vietnam at present), and the length of stay on average was 6.5 days. After switching to the DRG system, currently the duration of stay is less than 3 days on average, a reduction by half compared to the past. This shows that the professional capacity of each hospital has room for improving treatment quality, reducing length of stay even more through reforms in financing mechanism, payment mechanism. In addition, with the package payments, the higher level hospitals suffering overcrowding, will be prioritized for receiving diseases and diagnostic groups with higher payment levels (usually the most difficult severe cases), leaving the slighter, easier cases for lower level facilities to treat.

However, this provider payment (especially DRG) also has some difficulties, limitations.

(i) In order to ensure standard quality of care, care pathways must be developed based on standard treatment protocols, yet this is not an easy task nor is it inexpensive. Because of medical science progress, the pathways need to be updated constantly. Medical workers must be trained to use the care pathway. The physical facilities, management qualifications of the hospital also need to be assured. Experience in some countries indicates that transforming from fee-for-service to the full DRG requires about 10–15 years. However, each country that has applied it has found many advantages because they could draw lessons from experience of countries that had transformed their systems earlier, especially experience in classifying diseases by the DRG and developing care pathways.

(ii) Sometimes the decision to classify a disease into a diagnostic group relies simply on one clinical symptom. This is usually determined by the clinician. Thus, the clinicians may have the tendency to categorize patients into diagnostic groups with higher payment levels.

(iii) Hospitals may over economize on costs, negatively affecting quality of care. Hospitals may discharge patients too early, before they are fully stabilized, then readmit them to count as 2 treatment episodes. There is a risk of increasing admissions for cases that could be treated as outpatients in order to increase revenues of the hospital. These are some of the reasons for overcrowding of hospitals, especially inpatient wards. Hospitals might cream skim by only admitting easy patients but with higher reimbursements while referring more severe patients to higher level facilities.

(iv) There is a need for a management mechanism, professional controls and effective financial controls, quality assurance for medical services, and at the same time regular updating of care pathways.

### **Global budget**

Global budget is a provider payment method where service provider is paid a fixed budget covering all costs for health care services within a community bounded by a specific administrative unit (e.g. province, district), during a certain time period (usually 1 fiscal year). This is also a form of capitation, but the allocation is for health care of the entire community, not for a group of individuals (as in the capitation payment method used by health insurance).

A fixed prospectively-determined budget creates the incentive to motivate the service provider to estimate their budget and use the allocated budget in the most rational, economical and efficient way possible. The global budget amount can be determined based on a per capita amount, or based on a scientific basis with adjustment coefficients based on different criteria, for example: morbidity and mortality patterns and rates, proportion of elderly people and children, the proportion unemployed, educational level, economic conditions or geographic conditions. There is a need to develop a minimum norm, or a minimum investment level for health per capita. This norm can be adjusted (with a growth coefficient) based on scientific calculations including the criteria suggested above.

The global budget can be determined on the basis of information about inputs (number of beds, staff), combined with intended results or performance targets to be achieved. Global budget financing usually relies on data of the previous year for the provider, or on average costs of different providers with similar nature and size. Results-based global budget financing is based on the volume of services actually provided. The latter of these two methods is more complicated and requires more information on volume and complexity of the services delivered by the provider.

In general, this is a modern and effective health financing mechanism. On the basis of total funds allocated, health facilities will have comprehensive responsibility for health care of the community, pay more attention to preventive medicine, primary health care, care at home, and limit to the greatest extent possible hospital admissions in order to reduce costs, increase efficiency of health care activities. This payment mechanism helps to create a tight link between preventive medicine, primary health care, treatment and rehabilitation as a block, with responsibility for comprehensive health care of the population rather than separate independent networks for preventive medicine and curative care such as exists in Vietnam today.

Unlike input-based financing, global budget-based payment does not link any specific targets to budget lines according to fixed norms. The principle of global budget, in many aspects, is compatible with Decree 43 [45]. This payment method is taking shape and being refined for use with state budget funding with an orientation of strengthening autonomy of health service provision units.

However, the global budget must be of adequate magnitude, and appropriate with the needs for health care of the community so the health facility has adequate resources to ensure health care of the people. The global budget mechanism may restrict incentives for improvements in productivity or quality improvements when the provider tries to minimize costs to maximize profits. The benefits of service users may not be guaranteed if there is no effective mechanism for monitoring and evaluating performance and quality of services.

#### Capitation

In capitation-based payment, the service provider is paid a certain package of money per number of registered patients at their facility. Usually capitation is implemented through the health insurance fund contracts that allocate a certain amount of funds to the health service provider to provide services for people with health insurance. This is form of capitation for the subgroup of people with insurance, not for the entire community. This prepaid budget includes all costs related to the service package (could include preventive and curative services) provided over a certain time period (usually 1 year). Capitation is usually applied as payment mechanism from health insurance fund for service provider in a contractual agreement. Contribution of participants is defined based on financial risk sharing principle within scope of the fund. The premium rate is usually identical for all participants, or could be different (usually in commercial health insurance fund, the premium depends on degree of health risk, probability of morbidity of each category of insurance beneficiaries). Capitation is proven effective in countries with high insurance coverage, especially compulsory social health insurance.

The basic advantage of capitation-based financing is that it encourages the health facilities to organize provision of services that are cost-effective, economize on costs, with low overall costs of treatment, yet still ensure quality of services so patients recover quickly and don't require prolonged treatment. Capitation also encourages a certain level of coordination between curative care and preventive medicine activities, especially for individuals who have high curative care needs (such as the elderly, people with chronic diseases, etc.). Encouragement of early care seeking to reduce treatment costs compared to costs of delayed treatment at higher level facilities can also improve efficiency of health care. For instance, the capitation project based in the National Health Security Office in Thailand has proved the efficiency gains when health care providers develop networks of providers in the community to limit higher cost hospital-based treatment services [94].

Administrative costs to manage capitation-based financing are relatively lower than other system, including lower than case mix or global budget financing.

Despite the strengths mentioned above, capitation payments also have some disadvantages: (i) Risk pooling is only implemented among people participating in health insurance, not across the entire community. (ii) Medical facilities still primarily focus on medical examination and treatment services. If there are any preventive activities, they are only concentrated among people with insurance, rather than preventive activities or primary health care for the entire community. (iii) With this payment mechanism, the agency that manages the fund (usually the health insurance agency) collects contributions from the people to pool the risk when they are ill, but transfers the risk entirely to health care providers through providing a fixed amount of money for them to use to cover all services needed by the covered population. (iv) Currently because the contribution amounts are low, the capitation fund provided to health facilities is also low. In addition, adverse selection (many sick people with a high need for health care participate in health insurance) is another reason for the shortfall in funds or lower health service quality. (v) In order to increase revenues,

providers may collect additional amounts from health service users through various means (for example through elective services, foreign drugs not on the regular insured drug list, etc.).

#### Salary

Payment for salary is a method that pays part of the cost (labor cost) for health workers in the public sector, and under salary payment, doctor's income is not linked to output such as quantity of items or quality of services. This method is applied in a certain condition, for example to meet the requirements to maintain regular activities of health workers in locations, less developed socio-economic regions and service provision capacity, or for services that have less income (e.g., preventative care or social diseases).

Salary-based payment can be variable depending on the conditions. For example, in the preventive medicine, curative care or different specialties with different training time. This method is quite popular in India, South Africa, or even in the basic health care system for US war veterans.

It is obvious that when the payment is stable (by grades and steps, working time) without linked to workload or work quality, this means that this payment method discourages motivation to promote productivity and service quality [95] especially in the context of low salary of Vietnam.

### Summary

Each provider payment method has its own advantages and disadvantages; there is no perfect method [95] (Table 5). Reform efforts are trying to balance different objectives toward harmonizing alternative methods [96]. Methods applied simultaneously with integration into identified objectives, in each condition, by sphere of services, with priority and policy objectives to respond to actual need for health care in each country, each socio-economic region.

Payment method	Advantages	Disadvantages	Empirical evidence
Budget allocation according to expenditure item	Controls cost escalation; Simple, easy to apply	Limits investments in technology, high tech medicine; little improvement in treatment quality; Cream-skimming.	German health system uses a flexible budget allocation system. Currently the budget is allocated on the basis of the DRG system and hospitals can only be reimbursed a maximum of 35% of costs exceeding the budget allocation. Thus, hospitals usually try to ensure total expenditures don't exceed the budget.

#### Table 5: Summary of advantages, disadvantages of alternative payment methods

Payment method	Advantages	Disadvantages	Empirical evidence
Fee-for-service	Promotes increased productivity, increases service provision, increases quality of services	Overprovision, especially in lab tests, diagnostic imaging and pharmaceuticals, prolongs treatment duration causing overcrowding in hospitals; increases costs for patients and health facilities and general society; high administrative costs.	The Belgian reforms in the 1990s were focused mainly on eliminating abuse, inefficiency, in use of resources, problems directly related to fee-for- service payments.
Per day payment	Simple administration, more attention given to patients	Increase in number of admissions and length of stay, provision of less cost-effective treatment	Until 1995, Luxembourgian hospitals were financed mainly on the basis of a uniform per diem payment. Following a financial shortfall the government abolished it and introduced a prospective payment system.
DRG payments	Economize on costs, increase effectiveness in use of resources through use of cost-effective solutions, minimize use of unnecessary services.	Cream-skimming, increase in admission, premature discharge, high monitoring and verification costs	In Australia DRG payment is considered to be efficient but criticized for 'quicker but sicker discharge'.
Global budget	Cost containment, increased effectiveness in use of resources through providing primary care, preventive interventions in the community, tight integration of preventive and promotive medicine with curative care	Restricted provision of health services	Thailand applies the global budget and allocates it to facilities using the DRG system
Capitation	Cost containment, increases effectiveness in use of resources through early provision of health services	Under provision, increase in referral to hospitals and specialists, low quality of care	In Spain general practitioners receive a fixed salary plus a risk-adjusted capitation component. The risk adjustment can be based on the risk factors such as age.
Salary	Cost containment, equitable provision, easy administration	Low productivity, low quality of service, low morale of providers, informal payments extracted from patients.	In Hungary, informal payments a major problem. Since 2002, the current government has raised the salary by an average of 50% to tackle the problem.

Source: Based on Technical Briefs for Policy Makers – Department of Health Systems Financing, WHO, Number 2, 2007

Attention should be paid to structure of hospital financing source and distribution of insured and uninsured patients (in which 60% comes from the state budget and health insurance fund, about 40% arrives from household out-of-pocket money of uninsured patients) [97], the selected payment method should meet characteristics of both groups. Methods that require resource concentration proportionate with the public spending or health insurance fund but fail to respond well to direct payment of service users.

In order to meet up the requirements of both user categories, a survey report [98] on "user fees and DRG payment methods" analyzed potential advantages and possible disadvantages of each provider payment method and propose a combined global budget and DRG payment as an appropriate choice for the Vietnamese health care system. The global budget on capitation is applicable to the subsidized portion of the state budget and budget for outpatient care activities. The DRG payment is applicable to inpatient care. This combined payment method meets up the criteria for direct payment, in short-run of the uninsured group and gradually replace the fee-for-service payment for both insured and uninsured patients.

## 2. Current provider payment methods in Vietnam

#### 2.1. Initial results

In Vietnam, health facilities are financed based on the following mechanisms:

State budget allocated to state hospitals and health care facilities based on a fixed budget norm (budget line), mainly based on input criteria, for example: Number of beds, number of staff, etc.

Fee-for-service payments: This payment mechanism is the most widely used in Vietnam. Fee-for-service payments are applied to patients with health insurance and those who pay fees directly out-of-pocket. This payment mechanism is causing much hardship for the health system, especially the problem of overprovision of unnecessary services in state and private health facilities, leading to escalation of health care costs.

Capitation: This payment mechanism is being rolled out at the district hospitals throughout the country and is mainly applied to health insurance payments.

Package payments: Currently this method is being pilot tested. The Ministry of Health has set up a steering committee, decided on the initial medical conditions to focus on, developed care pathways, estimated costs and amount to charge, and has pilot tested package payments for a few conditions, with plans to increase to 20–50 common medical conditions in the near future.

Diagnostic related group payment system: This is the long-term plan for Vietnam after applying package pricing.

Global budget: Vietnam has not yet applied this method.

Salary payments: Currently being used in Vietnam.

Thus, the main payment methods being used in the health sector in Vietnam include state budget allocation according to budget lines, salary for health workers in the public sector, combined with fee-for-service. Some new methods are in the period of pilot testing including package pricing with a long-term orientation to apply the DRG payments. In general, Vietnam's provider payment mechanisms remain backwards, with many shortcomings, especially the fee-for-service payments, leading to widespread overprovision of health services, health cost escalation, and low effectiveness in health financing. Therefore, reforming the provider payments in Vietnam is very necessary to strengthen performance of the health system, and at the same time to economize on costs for the people.

Political commitments for reforming provider payment methods are being implemented. The Ministry of Health has established a steering committee for reforming provider payment method [99] and a technical group for provider payment reforms [100]. These are very necessary preparations for organization and human resources to direct and implement reforms with a large volume of complex tasks in terms of both policy and technical areas. A roadmap for developing and implementing a package payment mechanism and eventually a DRG system has been drafted. Initial steps are being implemented to apply capitation payments at district hospitals and package payments for common conditions. The Rockefeller Foundation is providing technical assistance to develop a roadmap for implementing provider payment reforms, consulting the experience of Thailand, Malaysia and a few other countries. Following the pilot model of package payments for four diseases in Thanh Nhan and Ba Vi hospitals, package payments applied to 20 common conditions with high frequency are expected to be applied in 2013. The above issues have received Government and Ministry of Health commitment in a project document on "Health human resources development program" (Component 3- Strengthening management capacity for health service delivery) using loan funds from ADB and non-refundable grant from the Australian Government. At the same time, the Ministry of Health in Thailand and the Ministry of Health in Vietnam are planning to approve by the end of 2011, a cooperation program for technical assistance including a component related to developing the DRG and capitation payment mechanisms.

Adjustment of service prices for medical examination and treatment services are also being promoted. Out of more than 3000 medical services, the Ministry of Health is developing and plans to adjust the charges for 50 basic services. The methodology for costing and the database related to service costs based on a full and accurate estimate of costs is an important prerequisite to continue developing and applying package payments on a larger scale.

The World Bank and the Delegation of the European Commission are also supporting the Ministry of Health to implement pilot study projects for different payment models, including capitation payments and results based financing. These projects pay special attention to promoting primary health care with a strategic orientation that considers primary health care the determining basis for the capacity of the health system and an efficient approach to achieve the goal of equity in access and use of health care services for all. The main goal of projects to strengthen effectiveness in use of resources and quality of health care through incentives in the new provider payment mechanisms to encourage productivity and quality of early health care service provision in the community.

The above provider payment mechanisms are oriented towards payment for performance, quantified through more appropriate product units (for example service packages, number of cases treated) instead of individual services or according to input-based payments like at present.

#### 2.2. Difficulties, limitations

Besides initial promising results, health financing reforms in general and provider payment reforms in curative care in particular are facing many different challenges, from policy orientation, technical capacity and information system conditions and management capacity of stakeholders. In general, efforts to study and apply provider payment mechanisms for curative care are still in the form of pilot models. The section below will present some of the main difficulties and priorities.

#### 2.2.1. Lack of strong and clear orientation for provider payment reform

Health financing and provider payment method reforms require awareness of how the policy fits within an overall orientation because this is a complicated area, subject to the influence of many different factors such as economics, culture and society. Reforming provider payments is one of the 'control knobs' in the health system, and needs to be paid attention to. However, reforming provider payments will have trouble succeeding if there are not comprehensive reforms in other important areas of the health system. With the reality of the health care system in Vietnam, the success of provider payment reforms depends a lot on effective support of related mechanisms, in an environment that is facing may changes: for example autonomy in public health facilities that continues to be strengthened; the market for pharmaceuticals and medical consumables that is not yet tightly controlled; mechanisms to support the poor, the near poor and other vulnerable groups through health insurance that has not yet proven as effective as they could possibly be; solutions for improving quality of medical services, protecting rights of the health service users need major improvements in the management and operational mechanisms.

Although requirements for payment reform are apparent, actual actions are still very limited for many reasons. Knowledge and empirical experience in payment methods is inadequate while research capacity and supporting evidence is not strong enough to set forth appropriate reform as well as to identify requirements for technical capacity and resources for applying the new provider payment method. Supply side reactions (both negative and positive) to alternative payment methods are aimed at preserving the rights of the respective health facilities.

Due to the lack of supportive evidence and general capacity, there is not yet a unified plan for health care provider payment reforms, nor strong commitments for developing and issuing policies. There is a need to develop a plan for integrating efforts at reforms according to a common orientation. This plan needs to reach the goal of developing and applying an integrated system of mechanisms to achieve basic requirements on (1) transparency (both supply and demand sides), (2) encourage both productivity and quality, (3) encourage early care and support establishing a rational referral system (clinical care and services are provided at appropriate technical level and costs), (4) flexibility to take this model to local conditions (5) participation of stakeholders and development partners and involvement of the service providers entire the process with updates and development. The master plan for reform should also include specific measures and actions for developing implementation in a new payment method, and investments in management information system.

#### 2.2.2. Lack of driving force for reforms and effects of some interest groups

The fee-for-service payment method is being used widely, for almost all medical care services. The negative impacts of this method are apparent. However, to change away from this method faces many impediments.

The fee-for-service payment mechanism affects overprovision of health services (mainly because of the service provider), and leads to waste of resources, medical service cost escalation and increased medical costs for the whole society. This payment mechanism may bring benefits to some special interest groups, including service provider facilities, companies, manufacturers and distributors of medicines, contributors of capital, equipment

companies installing their equipment in hospitals through social mobilization... These special interest groups usually are not enthusiastic in transforming towards other more economizing provider payment systems.

#### 2.2.3. Not yet adequate investments in operational research in new payment methods

Recently there have been some operations research and pilot studies of reforms towards alternative provider payment methods (capitation, package payments, DRG), yet these remain fragmented in various units or agencies, and there has not yet been adequate unified cooperation according to a common master plan. Capitation payment has been implemented in a relatively large number of hospitals (7 central hospitals, 70 provincial and regional general hospitals, and over 4000 district hospitals, regional polyclinics, health units of employers and private clinics, etc.) [101]. The package payment, a simple version of the DRG has also been piloted since early 2010. However, there is not yet adequate investment in technical work and other necessary resources. There has not yet been adequate investment in operations research and supply of evidence for new provider payment methods in the context of Vietnam, limitations in design, implementation and results from the pilots of alternative methods. Objective and systematic assessment should be undertaken to provide orientation evidence for the reform of payment methods in coming years.

In reality, research activities, pilot tests of new provider payment mechanisms in recent years has indicated a lack of unified cooperation between departments, administrations and other relevant units to implement reforms of provider payment mechanisms.

#### 2.2.4. Hospital management capacity fails to meet requirements for reform

Hospital management capacity, especially financial and service management, is a shortcoming that directly affects the process of reforming the operational mechanism and financing mechanism in general and reforms of medical service provider payment reform, in particular.

Lack of professional management skills is repeatedly mentioned, with 89% of hospital managers in Vietnam were promoted from clinicians [102].

In the process of transforming the provider payment mechanisms, the health management information system of hospitals is extremely important. However, the hospital management information system in Vietnam currently has many shortcomings, lacks a standardized approach, does not allow for sharing of information between hospitals. When applying package payments or DRG, the classification of diseases must be based on international classification systems of disease (ICD-10) and many other criteria. Application of information technology and strengthening hospital management qualifications are imperative.

#### 2.2.5. Management of health insurance that is more professional

General management capacity and policy negotiation ability and supervision of service provision should be substantially improved to better respond to synchronous requirement for capacity, costs, efficiency and service quality. Contents that service users representative (Vietnam Social Security - VSS) should prioritize to solve include capacity in insurance verification related to appropriateness, costs and quality of insured services.

The information system supporting insurance audit should also be strengthened. The current manual auditing methods are unable to meet the need for insurance audit in the current context of continuing development of health insurance program with increasing beneficiaries and services. The development of an electronic information system and a computerized audit system is a practical need to reduce administrative costs and burdens of manual recording and reporting work.

Contents related to development and implementation of contract between service provider and payer should also be amended. The growth in the health insurance program has created major change in the relation between service provider and payer. Contract agreement between the two parties should reflect new provisions with clear understanding about the prospective payment amount, based on performance and measured by appropriate indicators of types of service, quantity and quality of service and specially obligations to implement agreed terms and provisions.

Another important limitation is fragmentation of resources paying for health care services. As a result, the payment method fails to bring in full play necessary strengths of financial tools to support the reform. Public funding sources are independently managed (salary, recurrent spending is solely managed by the health sector; direct costs such as drugs and consumables ... are managed by VSS) and uninsured patients pay out-of-pocket money. Such a multi-party payment method cannot be seen as an effective management tool. Coordination and merger of all resources at the highest level is an important condition that allows the payer to get more power in negotiating and implementing the contract signed with service provider.

## 3. Priority issues

## 3.1. Lack of a unified and consistent reform plan and strong commitment

- Lack of consistency in the policy environment between strategic orientations and operational policies and measures (policy on fee-for-service, pharmaceuticals, orientation and policy on strengthening autonomy in public institutions (including hospitals and other health care facilities) to secure successful reform efforts.
- Lack of a synchronous reform plan and corresponding commitment at policy making and issuance and, no pertinent investment is made in studies on new provider payment methods.
- Recent studies and pilots of alternative provider payment methods (capitation, DRG) are small-scale, lacking concerted coordination in a joint master plan.
- Policy advocacy and strengthening policy making capacity in relation to the reform is limited because there is no consensus between stakeholders in policy making process and policy implementation of health financing in general, and provider payment method, in particular.

## 3.2. Lack of factors ensuring essential techniques for developing and applying new provider payment mechanisms

- Database system covering both hospital medical and financial information is inadequate, lacks standardization. There remain very large shortcomings in interoperability and information sharing in hospitals (in particular in relation to clinical information and cost information)
- Lack of methodology and management skills and use of hospital management information (method and skills in applying international classification of diseases (ICD-10), medical interventions (ICD-9-CM).

## 3.3. The role of Vietnam Social Security remains limited

- The role and capacity of VSS the payer representing for service users and an important member in the process of provider payment reform should be further enhanced to respond to the requirements for a health financing mechanism with more advanced payment methods.
- Management capacity, in general as well as policy negotiation skills and capacity in supervision of service provision and capacity to verify contents related to the appropriateness, costs and service quality is limited.

## 4. Recommendations

In order to gradually resolve priority problems identified above, the report makes recommendations for several groups of interventions (see detailed recommendations in Chapter 12):

- Strengthen policy discussion, exchange information, evidence and develop a consensus for reforming health financing, including provider payments.
- Refine technical contents for development and application of more advanced provider payment mechanisms.
- Strengthen the role of the VSS in developing policies and implementing provider payment reforms.

## **Chapter 9.3: Roadmap towards Universal Health Insurance**

This chapter provides an overview of achievements, impediments and limitations in implementation of the Law on Health Insurance, focusing on insurance coverage among major beneficiary groups. On the basis of this analysis, priority issues will be identified and recommendations made for appropriate solutions.

#### 1. Perspectives on universal health care

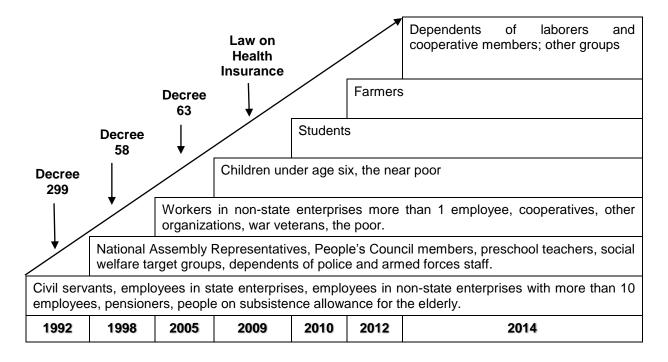
In reality, there is no nation in the world that ensures 100% of its population has health insurance. Countries achieving high health insurance coverage may reach 95–98% of the population. However, there are population groups that health insurance cannot fully cover, for example the homeless, people living in very isolated remote mountainous areas, etc. If we were to try to achieve health insurance coverage for this small remaining group (a small percentage of the population), the administrative and management costs of implementation would be very high and it would not be efficient. Therefore, with these population groups, when they are sick, the State needs to have a supplementary financial support mechanism that is more efficient, less wasteful (for example direct exemptions, health care support fund, etc.), rather than trying to get 100% of the population covered by health insurance (something that is nearly impossible).

Therefore, the general opinion on universal health insurance coverage is: Almost all people in society will have health insurance, and for the few cases that don't an alternative appropriate financial support mechanism for sickness will be available to ensure full access to health care services. According to World Health Organization Resolution No. 58.33 "to ensure that health-financing systems include a method for prepayment of financial contributions for health care, with a view to sharing risk among the population and avoiding catastrophic health-care expenditure and impoverishment of individuals as a result of seeking care" [103]. In some countries, universal coverage provides free health care services for all citizens, and is implemented through use of state taxation, or social health insurance provided by the state to serve all its citizens.

In Vietnam, health insurance is regarded as a right to health care of all people accompanied by obligations to contribute and share responsibility of individuals, communities and employers and the state. Health insurance is seen as a product of social progress where everyone is responsible to their own health and society in terms of health care not solely rely on their own socio-economic conditions, support from the family and relatives when they fall sick. Health insurance is a tool that creates equity in health care as health care benefits are regulated by the law not the so called "ask for - give to" mechanism similarly to fee reduction or exemption method as previously applied. The state budget and health insurance are considered as the two most important sources of health financing in Vietnam in the coming period. Development of universal health insurance is a major policy of the Party and of the Government.

Article 51 of the Law on Health Insurance regulates the timing when different social groups are responsible to participate in health insurance, and is regarded as a roadmap toward universal insurance coverage (Figure 9). By which, by 2014 all Vietnamese citizens are accountable under health insurance coverage. This regulation ushers understanding that by 2014, Vietnam will obtain full coverage of health insurance. However, some opinions say by 2014, Vietnam will start the roadmap to universal insurance because by that time the non-covered groups will begin to be included in health insurance as regulated. Whatever the issue

is understood, as regulated by 2014 Vietnam has to achieve its goal of universal health insurance, that is almost all the Vietnamese population will participate in health insurance. The Five-year Health Sector Plan (2011–2015) has set the goal by 2014 for 76% and by 2015 80% of the population will have health insurance.



#### Figure 9: Roadmap for universal coverage of health insurance

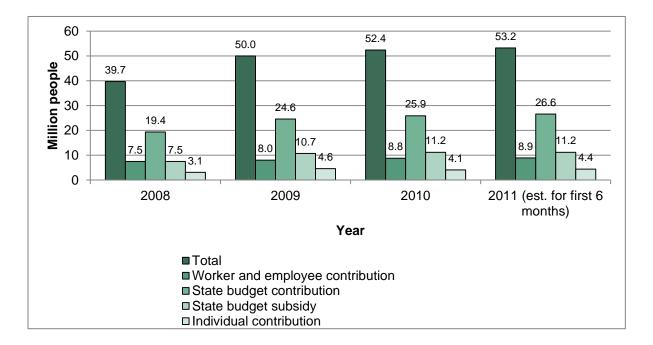
## 2. Situation analysis

## 2.1. Progress and results

#### 2.1.1. Number of people participating in health insurance

The number of people covered under health insurance by the end of 2010 was 52 407 090, equivalent to 60% of the population, an increase of 12.65 million people compared to 2008 – the year the Law on Health Insurance was passed (Figure 10). The groups with the highest coverage are public sector employees: 100%; insured whose premiums are paid by the social security fund 94.3%; and the group whose coverage is paid directly out of the state budget: 84.5% [104].

The approximately 34 million people not yet participating in health insurance mainly belong to low participation groups, those are: (the near poor, even though the state provides a partial subsidy, participation only reaches 13.1% of the total in this group; farmers, dependents of workers, workers in cooperatives (33.4% coverage); workers in non-state enterprises (53.4% coverage). For children under age 6, even though 100% of their contribution is paid by the state budget, only 77.6% of the group is covered. The school pupils who are entitled to a 30% subsidy, also only reach 76% coverage (Table 6). Expanding health insurance coverage in these groups according to the Roadmap set out in the Law on Health insurance in order to achieve the goal of universal health insurance by 2014 is still a major challenge.



#### Figure 10: Number of insured by source of contribution, 2008–2011

#### Table 6: Population groups with low participation rates in health insurance

Group	Total	Number with health insurance (thousand)	Proportion covered (%)	Proportion not yet covered by insurance (%)
Children under age 6	10 103	7 837	77,6	22,4
Workers in non-state enterprises	11 911	6 361	53,4	46,6
Pupils, students	13 798	10 478	75,9	24,1
The near poor	6 081	800	13,1	86,9
Farmers, cooperative members, household enterprise workers	11 732	3 917	33,4	66,3

Analysis of the ability to ensure health insurance coverage for all groups by 2014 indicates groups with the potential for 100% coverage include: Employees of government administration and state owned enterprises; pupils and students; dependents of workers. Groups for which it will be extremely difficult to achieve 100% coverage include: Members of near poor households, members of agricultural households (agriculture, forestry, fisheries and salt makers) with average income, cooperative members and household enterprise workers, casual workers in urban areas [104].

Table 7 below presents the proportion of people covered by health insurance by region. Figures show that the proportion of people covered varies substantially across regions. The Northern Midlands and Mountains reach 77% coverage, while the Mekong River Delta reaches only 48%. Among the provinces in the Northern Midlands and Mountains, the mountainous provinces almost all reach 90% coverage because of the high

proportion of the poor and ethnic minorities for whom the state budget provides a full subsidy. However, Bac Giang, a province of this region, has very low coverage of only about 50%. In the Mekong Delta coverage is lowest in Ca Mau, not even reaching 40%, while Tra Vinh has higher coverage at over 67%.

		2009		2010			
Province, city	Population (thousand)	Covered by health insurance (thousand)	Percent %	Population (thousand)	Covered by health insurance (thousand)	Percent %	
National	86 025.5	50 070.0	58.2	86 866.0	52 407.1	60.4	
Red River Delta	19 631.6	10 814.6	55.1	19 823.6	11 311.9	57.1	
Northern Midlands and Mountains	11 094.7	7 123.7	64.2	11 203.3	8 591.0	76.7	
North and South Central Coast	18 887.1	11 357.6	60.1	19 071.8	11 308.0	59.3	
Central Highlands	5 121.4	3 235.5	63.2	5 171.5	3 361.8	65.0	
Southeast	14 063.8	8 308.0	59.1	14 201.4	8 250.2	58.0	
Mekong Delta	17 225.9	9 230.6	53.6	17 394.4	8 318.7	47.8	

Table 7: Number of people cove	ered by health insurance	by region, 2009–2010
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Source: Vietnam Social Security and Health Insurance Department - Ministry of Health

#### 2.1.2. Health insurance fund balance of revenues and expenditures

After many years of imbalance in health insurance fund (accumulated overspent in 2008 was 655.5 billion VND, in 2009 was 3083 billion VND), the current insurance fund is balanced between revenue and expenditure due to extent to other groups, especially the group subsidized by the state and the premium is adjusted by 4.5% of basic salary in almost all groups (previously 3%), and other cost containment measures. In 2010, after making up the deficit from 2009, the health insurance fund had a surplus of 2818 billion VND (Table 8).

Indicator	2008	2009	2010
Number of people (million)	40.0	50.1	50.7
Revenue (billion VND)*	9 608.4	13 035.0	25 238
Expenditure (billion VND)	10 364.7	15 481.4	19 665
Balance (billion VND)	-756.3	-2 446.4	5 573
Accumulation (billion VND)	-655.5	-3 083.0	2 818

Table 8: Balance of revenue-expenditure of health insurance fund, 2008–2010

\*Revenue excluding income from investments and other sources.

Source: Vietnam Social Securities and Health Insurance Department - Ministry of Health.

#### 2.1.3. Access to health care services by insured patients

In 2010, there were over 106 million patient contacts for insured people, with a total cost reimbursed by health insurance of nearly 20 000 billion VND. Table 9 indicates that the most frequent users of insured health services with the highest cost per contact are among people who voluntarily participate in health insurance with 3.04 contacts per person per year and average cost of 931 000 VND per person per year. This is followed by pensioners and groups receiving state subsidies to buy insurance with a frequency of examination visits of 2.72 visits per person per year and average costs of 884 000 VND per person per year.

The higher number of examination visits in the first group compared to other groups has been established to be due to the way some health facilities manage health insurance, i.e. to increase the number of prescriptions but stay below the required prescription per visit norm set in the contract with VSS, and does not truly reflect the demand for health care services of this group.

Group <sup>*</sup>	Outpatier	Outpatient charges Inpatient charges		Overall				
	Total outpatie nt charges (milliion VND)	Charge per outpatient visit (thousand VND)	Total inpatient charges (million VND)	Charger per inpatient admission (thousand VND)	Total visits/ admissions (thousand visits)	Total health insurance reimbur- sements for examination and treatment (million VND)	Average reimbur- sement per card (VND)	Contacts per health insurance card (contacts)
Group 1	2 149 669	73 761	1 724 784	811 144	31 270	3 874 453	434 116	3.50
Group 2	3 773 552	215 802	2 316 945	1 816 049	18 762	6 090 497	883 892	2.72
Group 3	3 130 150	146 010	748 841	478 757	23 002	3 878 991	272 485	1.62
Group 4	1 247 836	107 042	419 604	493 336	12 508	1 667 440	212 749	1.60
Group 5	668 584	87 891	344 957	621 526	8 162	1 013 541	96 728	0.78
Group 6	1 913 657	166 988	1 847 778	2 209 922	12 296	3 761 435	931 016	3.04
Total	12 883 449	130 410	7 402 909	1 027 041	106 000	20 286 358	387 092	2.02

Table 9: Health examination visits for insured people and costs, 2010

\* Group 1 is mainly workers in government agencies and enterprises; Group 2 is pensioners and people receiving state benefits for merit or welfare; Group 3 is the poor, ethnic minorities and the near poor; Group 4 is children under age 6; Group 5 is pupils and students; Group 6 is people voluntarily participating in health insurance.

Source: Vietnam Social Security and Health Insurance Department - Ministry of Health, 2011

The insured patients are entitled to access all health care services depending on their need for health care. Access to service is relatively stable across levels (Table 10). In 2010, health care visit at CHC increased by 4.5% over 2009 while visitors to district facilities fell, respectively. No increase in outpatient care visit is recorded. Basically, CHC is able to meet health care need of insured patients.

Indicator	2008	Percent	2009	Percent	2010	Percent
Total health care visits	71 034	%	92 510	%	106 022	%
Outpatient visits	66 455		85 764		97 502	
Central level	2 192	3.3	2 878	3.4	2 835	2.9
Provincial level	14 938	22.5	18 689	21.8	20 824	21.4
District level	27 636	41.6	39 103	45.6	41 099	42.1
Communal level	21 690	32.6	25 094	29.3	32 744	33.5
Inpatient visits	4 578		6745		8 520	
Central level	427	9.3	649	9.6	708	8.3
Provincial level	1 988	43.4	2 914	43.2	3 818	44.9
District level	2 110	46.1	3 116	46.2	3 823	44.9

Communal level	53	1.1	67	1.0	170	1.9	l
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Source: Vietnam Social Security and Health Insurance Department - Ministry of Health.

#### 2.1.4. Health insurance benefits

People covered by health insurance will get benefits in health examination and treatment, rehabilitation, routine antenatal check-up, birth giving; health care check to screen and early diagnose some diseases, referral from district to higher level (for some groups) in case of emergency or under inpatient treatment but must refer to higher level due to clinical techniques. Compared to previous regulations, benefits of insured people as indicated in current Law on Health Insurance and guiding documents are relatively comprehensive and extended.

Health insurance benefits related to drugs, tests, diagnostic imaging or surgery and medical procedures do not have specific limitations. Almost all clinical techniques, paraclinical services provided in health care facilities are paid by health insurance. List of drugs covered by insurance currently includes 900 types of western drugs (active ingredients), 57 radioactive substances and marking compounds, nearly 300 traditional medicines and products produced from traditional medicines, including drugs equivalent to that in developed countries. For example, the drug list for treatment of cancer includes the same drugs on the list for use in Quebec, Canada [104], in addition other cancer treatment drugs or drugs to prevent rejection of transplanted organs not on the list are still eligible for 50% cost reimbursement through health insurance for people who have had health insurance continuously for 3 or more years.

#### 2.1.5. The state management and organization of the Law on Health Insurance

The Ministry of Health is assigned state management role for health insurance with specific tasks of developing legal documents, policy for health insurance; Develop strategy, master plan for universal health insurance; Issue a list of drugs, techniques; develop solutions to balance insurance fund; Communications; Stewardship for implementation; Inspection, check and penalty any infringement. Meanwhile, the Ministry of Finance is responsible for working with other sectors to develop policies and legal documents on financing in relation to health insurance, and check and inspection their implementation. Other line Ministries also take state management responsibility for health insurance within their scope of work. For example, the Ministry of Labor, War Invalids and Social Affairs is responsible for identifying those with meritorious contributions to the country, social target groups, the poor, near poor and make the list of beneficiaries under the insurance scheme with support of the state budget; also, the Ministry undertakes the function to check, inspect working regime and benefits for laborers as regulated by the law. At local level, people's committees at all levels are responsible for directing the implementation of the Law on Health Insurance, in which they have to secure sufficient budget to pay for insurance premium for eligible people as regulated, promoting education and communications on health insurance and undertake inspection, check and penalty on infringement.

Many instructions for implementation of the Law on Health Insurance have been prepared and issued by respective ministries and sectors depending on their technical responsibilities, and has brought about very important results. Those normative legal documents include Decree No. 62/2009/ND-CP guiding implementation of some articles in the Law on Health Insurance; Circular No. 09/2009/TTLB-BYT-BTC guiding implementation of health insurance; Circular No. 10/2009/TT-BYT guiding registration for primary health care and transfer of health insurance to serve patient. Meanwhile, other

relevant legal documents had been issued before effective date of the Law on Health Insurance, including Decree No. 95/CP and Circular No. 14/TTLB in 1995, Circular No. 03/2006/TTLT-BYT-BTC in 2006 on partial charge of user fee and service fee schedule; Circular No. 05/2008, Circular No. 02/2010 and Circular No. 31/2011 of the Ministry of Health updating the list of insured drugs.

Implementation of the Law on Health Insurance through regulations and instructions in legal documents mentioned above has been undertaken synchronously, timely and confirmed practicality and appropriateness of the Law on Health Insurance. Relevant agencies of health insurance, including VSS and health care facilities, have tried to fully implement regulations of the Law to secure eligible benefits for those under insurance coverage.

#### 2.2. Impediments, challenges

#### **2.2.1.** The role of political system is not yet fully brought into play

This is especially important factor, by which the political system plays both orientation and organization role for implementation of socio-economic policies including health insurance. To date, a part from Directive No. 38/CT of the Central Party Commission on promoting implementation of health insurance scheme in new situation, this is a lack of specific and strong stewardship of local authorities, limited involvement of mass organizations in health insurance policy.

Implementation of legal regulations for health insurance, translation of policy into actions from inclusion of beneficiaries to secured rights of the covered requires a groundswell of political commitment, consistent and synchronous viewpoints on the leadership, stewardship and organization for implementation and collaboration with relevant agencies including ministries, sectors and VSS. This is truly significant as it will affect the way we manage any arising problems in the implementation process. This process also requires a harmonized transition but specific and determined shift from the mindset of management to service for patients.

In regard to the role of people's committees at all levels, the state management in implementation of the Law on Health Insurance is unclear, nor full and specific responsibility for implementation, thus leading to ineffective and asynchronous implementation. Many localities are inactive to include new beneficiaries, and not regard insurance coverage as a target for socio-economic development.

Presently, each locality has its own implementation and inconsistent in treatment of problems as there are some regulations indicating likely "if work done as regulated is good, but if it is done better than expected, it is great". For example, the Law on Health Insurance regulates "the government subsidizes at least 50% of premium for near poor household, 30% for students" meaning that in any locality that has higher subsidies than 50% or 30%, the near poor and students will have more opportunities to be covered by health insurance than other locations.

#### 2.2.2. Health care service provision system still has many difficulties

The health service delivery system still faces many problems, and is failing to meet needs in terms of clinical techniques, service quality and administrative procedures. One of barriers to dissatisfaction and loss of confidence in health insurance policy is service provision limitation to meet people's need for health care. There is a lack of medical staff at commune health stations and district hospitals and limited capacity. Many people with insurance have to visit higher level facilities to obtain their desired quality of care [104].

Adjustment of clinical technique division and drug use by level to fit in new disease pattern is slow, thus many cases were referred and bypassed to take care at higher level. This poses difficulties for patients and wastes for health care facilities.

Selling prescription drugs over the counter is also widespread. People don't need to obtain a prescription to purchase prescription drugs at pharmacies while health insurance card is only valid when presenting at health care facilities contracted with VSS. These factors also affect the health insurance mechanism.

#### 2.2.3. Delayed reforms in user fee mechanism

The user fee schedule and fee-for-service payment mechanism have faced long delays before adjustment, while hospitals have to undertake financial autonomy and social mobilization of service provision. The situation of health service abuse (especially lab tests and treatment drugs) also occurs among patients with health insurance, causing difficulties for control of costs. Many patients with health insurance are still required to pay the difference between officially allowed charges and the charges actually required by the health facility, while managers have great difficulty to know how much more patients are paying.

The fee-for-service payment mechanism has many shortcomings, but the new provider payment mechanisms (capitation, package payments) are only now being piloted. The problem of setting a payment ceiling for patient referrals lacks a concrete orientation, and there is no legal basis for requiring that hospitals don't collect extra funds directly from patients if the ceiling is exceeded, thus affecting benefits of health insurance to patients.

In addition, co-payment in health care examination including high-tech with high costs, and no limitation on co-payment threshold therefore possibilities that patients with severe diseases, chronic diseases are unable to pay for treatment costs, or default treatment course are very obvious.

#### 2.2.4. The contribution amount and insurance benefit package are not aligned

Currently the health insurance contribution amount in Vietnam is low, while the benefit package of services continues to increase. This means there is not yet a balance between the contribution and the benefits. Determination of the contribution and benefit amounts is not based on scientific evidence. The situation of adverse selection, sick and elderly people with high health care needs participating in health insurance more has reduced the ability to share risks within health insurance and affected balance in the health insurance fund.

The benefit package (lists of drugs, technical services, medical consumables, etc.) is not updated regularly thus preventing patients from obtaining full benefits. A lack of concerted efforts and specific regulations on choice over technical list, especially list of supplies used in health care between different health care facilities also affects benefits of patients. Medical examination and treatment reimbursed through health insurance includes services at the commune level as well, but the drug and service lists that patients with insurance are allowed to benefit from at the commune level are few, while many drugs and services are quite simple for the commune, but are not yet available and the official lists have not been updated. This leads to the situation in which patients with insurance want to go to higher levels for medical services, and seldom seek care at the commune level. Regulations in payment for health care cost via insurance have some shortcomings, for instance, VSS applies a payment cap at 90% of health insurance fund counting on total cards registered at any health facility when paying health care costs for this facility and facilities at higher level. This leads up to the fact that health facilities have to limit benefits of patients and refrain from transferring patients to higher level. In addition, convenience and user-friendliness of public health services is below expectation of patients.

#### 2.2.5. Capacity for health insurance administration still has limitations

The capacity of VSS to implement health insurance policies is limited, professionalism and specialization is not yet high, especially in the area of health care, controlling health services. Shortage of staff and low levels of qualifications of claims processors sometimes affects the rights of patients participating in insurance and causes difficulties for settlement of accounts between health care facilities and VSS.

VSS mainly pays attention to controlling inputs and ensuring the fund and has paid little attention to quality and benefits to the insured. Thus only 30% of insured patients reported being satisfied with health insurance services [105]. In addition, VSS lacks a reliable database and high utility is also a cause that limits advisory role to timely policy accomplishment.

Administrative procedures in health care are and health care costs payment are complicated. This could be due to backward management system of health insurance system, and they work with the mindset of "keeping the fund" rather than "for public health." Controls on health service provision are not aimed at ensuring benefits to patients, but focus more on cost containment. The insurance audit procedure puts more weight in cost control and less on specific quality indicators which are appropriate with current payment methods such as fee-for-service and capitation. Because professional capacity is limited, claims processing of health insurance faces many difficulties.

VSS when implementing its responsibilities for claims processing or checking and assessing reasonableness of prescriptions for drugs, lab tests, diagnostic imaging, faces a shortage of needed staff and instruments. This is also one cause of conflicts in opinion, making it difficult to achieve professional agreement on costs that health insurance needs to reimburse to health facilities (health service providers) and health insurance (payer).

The state management role of local people's committee is also restricted due to administrative "vertical system" arrangement. Targets to include beneficiaries and implementation of health insurance agency is assigned by the central VSS to provincial social security offices are not connected and balanced in the provincial macro development plan, therefore it is very difficult to develop a specific plan to include new insurance beneficiaries in the province. The relationship between the health facility and the social security office is on the basis of a responsibility contract therefore the role of local authorities in dealing with any conflict is also limited. Given a vertical structure of the social security system, assignment to include new beneficiaries and management responsibility belongs to VSS, plus incomplete regulations in the Law on Health Insurance make local authorities confused in implementation the roadmap toward universal insurance.

Regarding the relationship between the health sector and VSS, the Law on Health Insurance does not clearly stipulate who is the head of the insurance executing agency, and there is some conflict on the functions and tasks. Moreover, some contents, especially insurance benefits issued by the Ministry of Health or jointly by the Ministry of Health and Ministry of Finance are not fully executed by VSS.

#### 3. Priority issues

Priority issues selected here are the key factors in implementing the Law on Health Insurance toward universal coverage. That is a problem related to eligible groups and clear interventions that can be resolved through concrete short-term solutions and strategic orientation.

## 3.1. Responsibility of authorities at all echelons in implementing the Law on Health Insurance is not clear, and lack a binding mechanism

Health insurance is one of social protection policy, for which people's committees at all levels must be held accountable for implementation. International experience shows that "implementation of social health insurance requires strong groundswell of commitment of the Government in protecting the poor people" [106]. Reality shows that where there is strong determination and leadership, the local people will enjoy benefits and fully covered by health insurance. This is especially important for the poor and near poor groups. Implementation of health insurance policy for the near poor in Ho Chi Minh City is a typical demonstration of the role of local people's committee in stewarding social policy implementation. In 2010, Ho Chi Minh City decided to raise poverty line higher than the national average, and fully subsidized all near poor. Similarly, Ba Ria Vung Tau province also supported 100% of the premium.

People's committee is the highest local administrative agency responsible for implementing health insurance policy. So, in order to fully fulfill their responsibility, local authority has to fully execute their state management role to protect the benefits and meet people's need for health insurance through close stewardship local agencies such as provincial health department, department of labor, war invalids and social affairs, department of finance and provincial office of VSS to reach a consensus by setting out specific targets, regarding development and inclusion of insurance beneficiaries as one of the targets in the provincial socio-economic development plan.

Effectiveness in health insurance management by the people's committees is apparent in the instruments they use such as procedures for supervision and regulation the relation between VSS and health care facility; a database for both health authority and VSS; appropriateness and synchrony of regulations, punitive regulations that binds responsibilities of entities in health insurance policy implementation; in line with the role, responsibility and power of the people's council and people's committee for health insurance management in the locality. The Law on Health Insurance (Article 8) regulates responsibility but not power scope of local people's committee.

The Prime Minister has issued the National Benchmark and National Health Target Programs for Developing Rural areas. Included in these documents is a benchmark on the proportion of the population covered by health insurance. Therefore, all levels of the Party, local authorities must put health insurance development into their resolutions, plans, action programs and socio-economic development and rural development in their locality, at the same time they need to develop mechanisms for monitoring, surveillance, evaluation of implementation for these indicators.

#### 3.2. Implementation of health insurance for some groups is facing difficulties

#### Low proportion of the near poor with health insurance

The Government has a policy to provide a 50% subsidy for the health insurance contribution for the near poor (people whose income is about 100–130% of the national poverty threshold). However, among the 6 million near poor people, only about 10% have obtained health insurance (except for a few provinces in which external assistance programs provided additional subsidies including the Mekong River Delta and the North Central Coast).

The level of state subsidies for health insurance contributions (50%) for the near poor is inadequate and does not guarantee that the near poor are covered by health insurance [108], while co-payment is high, and patients are unable to co-pay especially the high costs to treat severe illness or for expensive procedures.

Another barrier that prevents the near poor from accessing health services is high copayment. Given current 20% co-payment, and no ceiling limit for co-payment at least 1 year it will cause difficulties for patients to use high technology or long hospital stay. Over 50% of health care facilities it is impossible to charge the near poor when co-payment level is too high [79]. Therefore, the near poor will have more equal access to health care services like other groups when they have lower co-payment rate or ceiling limit for co-payment per year not exceed 2.5 million VND. This proposed limit will help take the near poor out of the poverty trap. However, attention should be paid to changing co-payment scheme so that this payment mechanism can bring in full its functions in cost control, limit use of unnecessary services.

Besides increasing the subsidy for the near poor and adjusting the co-payments, there is a need to promote strongly many other activities to increase the health insurance participation rate of the near poor, for example: Localities need to urgently determine who are the near poor; strengthen information and communication with the people about the benefits of health insurance and state subsidies; improve administrative procedures for obtaining health insurance and for payments so health insurance is closer to the people and more convenient.

#### Health insurance for workers on non-state enterprises remains low

Currently, there are nearly 12 million laborers in enterprises but only 6.36 million people are covered by health insurance, reaching 53.4%. Non-covered are those working in private enterprises. Non-coverage is related to limited awareness of employers about their responsibility to comply and protect the rights to health care of their employees. While the legal policies are asynchronous and inappropriate this leads to employers do not fulfill their responsibilities. Besides, high contribution rate may cause difficulties for enterprises. Another issue is low stance of laborers so it is difficult for them to claim their rights to health insurance.

The aforesaid problems are related to limited communication with employers and employees about their rights and obligations and the penalties in place for all parties not complying with policy implementation. Secondly, the weak role and coordination of trade unions at different levels with inspectors of local Department of Labor, war Invalids and Social Affairs, and Department of Planning and Investment to check and monitor trade union activities in non-state enterprises regarding implementing their responsibility to protect worker rights; sanctions and penalties are not yet strong enough. Thirdly, there is no necessary adjustment to support enterprises such as lay-off contributions, or adjustment of contributions in case of economic crisis, or their partners are in disasters.

#### Difficulties in development of health insurance in the informal labor sector

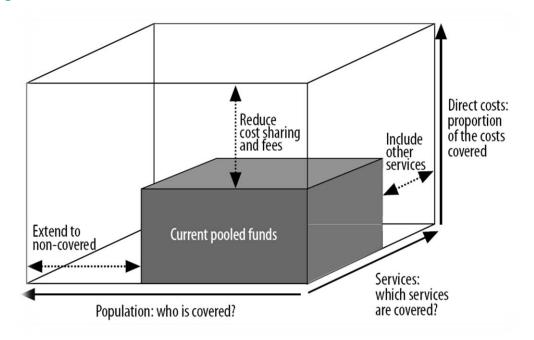
In Vietnam, there are about 36 million people not covered by health insurance, and most of them are from informal sector. This informal sector contributes about 20% of GDP but has no protection in front of health care risks. World health Organization reports indicates that in some developing countries, financial consequences due to diseases and sickness have made 11% of the population shoulder problems and 5% falls into poverty if no financial support is made [109].

In total 25 groups of health insurance beneficiary as regulated in the Law, 23 groups have been covered, but the remaining two groups pose real challenges. We haven't got a specific plan to expand health insurance among this group to fully secure their rights to citizenship and social responsibility. The viewpoint of "implementation of health insurance is both direct factor that protects the people from financial risks in case of sickness and momentum to maintain and develop the society" [109], inclusion of uncovered groups in informal sector should be regarded as a priority issue in health policy. This process requires specific plans in terms of inclusion number per year, funding source and contribution level and also necessary conditions to rationalize the plan based on characteristics of the laborers and management regime.

It should be noted that the current individual-based health insurance mechanism is not really equal for all family members. They all are family members, but any member covered by the insurance scheme, he/she will be protected in case of sickness while other members - could be breadwinner, or the elderly, or children - are not covered by health insurance. Household-based health insurance is regarded as cost-effective for the insured and VSS as the premium for whole family is lower, also helps reduce administrative procedures.

#### 3.3. Securing benefits and in-depth development of health insurance is limited

Over the past few years, the proportion of people covered under health insurance has increased rapidly to 58.4%. However, experts said that inclusion of health insurance beneficiaries has merely focused on expanding the number of people covered, while ensuring benefits or depth of coverage in the development of social health insurance programs should be paid greater attention (Figure 11). This is one of the factors under "quality" of health insurance. The quality of health services for people with health insurance must be assured, the patients must be satisfied and beneficiaries must be protected from financial risks when they fall sick. This is also a factor that generates "attractiveness" for people participating in health insurance, an important factor for sustainable development of health insurance. For many people, especially people with low incomes, people won't participate in health insurance if they don't see clearly the benefits of having health insurance compared to not having health insurance. In other words, if insurance benefits are not attractive, people will prefer direct payment and will not participate [112].





Source: The World Health Report 2010. Health Systems Financing – The Path to Universal Coverage.

The current health insurance fund has a surplus of about 22% of total revenue. The Law on Health Insurance stipulates that this fund is allowed to have a surplus equal to two consecutive quarters of the previous year. However, in the current situation, when quality of care is questionable and benefit package is limited (high co-payment, ceiling limit in higher level, and non-cover preventive services...) then the surplus up to 22% should be scrutinized as the nature of health insurance fund is short-term (revenue and expenditure is liquidated within one year), and is different from other social security funds. Meanwhile, if we have a medical cost containment mechanism to limit resource waste, making contributions to secure a sound insurance fund, it will help extend coverage. Reports from VSS and recent studies also show differences in frequency of health examination and treatment and medical costs between groups and across regions.

Causes of above situation could be attributed to: Limited capacity of the health care system, especially communal level; No inclusion of high-tech services; No standard treatment protocol and quality assurance procedure; Hospital payment method fails to create activeness for health care facilities; Patient bed-based budget allocation mechanism fails to promote effective management of resources and service provision with good quality to insured patients.

Universal coverage and assure access to quality care to provide people with better health is the target that almost all countries are heading for. However, the path for ultimate goal may be different in different countries. Although we have a roadmap for universal coverage, there are lots of difficulties and challenges ahead. Issues mentioned in this report is orientation laying out foundations for major changes in the future, especially expansion of coverage and enhancement of the state management in health insurance.

#### 3.4. Health insurance management capacity still has many shortcomings

As mentioned above, regulations in Law on Health Insurance are not clear in determining who leads the agency implementing health insurance and there are some

conflicts in functions and responsibilities. Duplication in some areas related to implementing policy, legislation on health insurance as well as lack of consistency and fragmentation in directing the system have led to impediments to expanding health insurance coverage. One more limitation that should be mentioned is that some documents have been issued that do not follow regulations, and are not in line with the relationships of groups involved in health insurance, and a lack of a database system and reporting mechanism to ensure soundness in the relationship between the state management agency and the implementing agency.

The health insurance management system requires greater professional qualifications compared to other health insurance funds, integrated management of health insurance covering both clinical management and financial management to improve effectiveness and still ensure the principles of unity and agreement. Therefore, improving capacity of the health insurance agency and the health insurance system in general is very necessary.

From this background, and a systematic viewpoint on the function, the Ministry of Health - within its state management scope in health care and protection for the people, and in health insurance - will be responsible for issuing policy for inclusion of health insurance beneficiaries, control of health service, assuring balance between the fund and benefits of relevant stakeholders as indicated toward the goal of "social protection".

## 4. Recommendations

In order to gradually resolve the above mentioned priority issues, the report makes several groups of recommendations described below (for more details see Chapter 12):

- Stipulate more concretely the responsibility of the local people's committees.
- Implement the mechanism to subsidize contributions and support entitlements of the near poor who participate in health insurance.
- Promote implementation of the legislation on health insurance participation for workers in enterprises.
- Expand health insurance for the informal sector.
- Reform the management model for health insurance.
- Ensure depth of coverage and health insurance benefits.

## PART III: HEALTH SYSTEM GOVERNANCE

## **Chapter 10.1: Health System Governance**

This chapter updates the situation of health system governance<sup>11</sup> in Vietnam, and focuses on analyzing, assessing the main achievements and shortcomings in the most important component of governance, the policy cycle, and on that basis determining priority areas, and proposing measures to resolve these priority problems. Some basic concepts and approaches related to the policy cycle are introduced to serve as the basis for discussion of issues presented.

## 1. Concepts and perspectives

## 1.1. The policy cycle

Health policies belong to public policies, that is policies that are developed and implemented in order to achieve the pre-set goals, to determine the work the government must do or will not do, and measures to resolve social problems, that is problems that influence the people. Policies are disseminated in the form of various forms of legal documents.

Policy-making is one of the most important tasks of governance. There are many models of policy-making, including the "rationalist model" that many scholars consider the optimal model [113]. In the "rationalist model", the process of developing and implementing policies includes a series of steps that are repeated so it is called the policy cycle. The classic policy cycle consists of 5 steps, that Australian scholars have detailed into 8 steps (see Figure 12).

The policy cycle was developed based on the perspective that the process of developing and implementing public policies is usually a continuous process with no final end point: each policy currently in effect could be considered the continuation, or dependent on one or more policies that were issued in the past; Policies currently in effect are always in need of adjustment to make them suitable with changes in the economy, society and culture; a policy that is currently being implemented may lead to new policies in the future. If all steps in the policy cycle are implemented well, this will guarantee that the basic features that an effective policy needs to have: in the public interest; effective; efficient; consistent, fair and equitable, reflective of the cultural values and social mores [114].

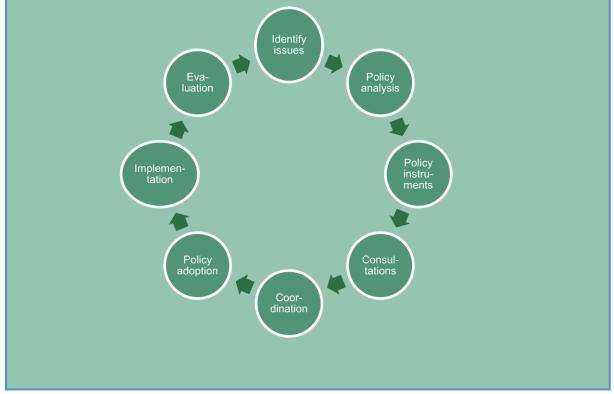
The beginning of each policy cycle is the problem determination or issue identification step, the step that determines whether or not to place some health problem onto the policymaking agenda. Recognition and correct identification of problems is not easy, and requires a process of analysis, comprehensive and objective assessment, based on criteria of equity, efficiency, development and quality of the health system, considers political, social conditions and context and in many cases political will and determination to face those problems.

After the problems have been detected and selected for inclusion in the policy-making agenda, the next steps of the policy cycle are to analyze to determine the causes of the

<sup>&</sup>lt;sup>11</sup> The concept of *health system governance* was mentioned in the Joint Annual Health Review 2010. Currently there is not yet a consensus on an appropriate Vietnamese translation of "*governance*". In this report, "*governance*" is translated as "*management*", according to the translation used by the Ho Chi Minh Administrative Political Academy (for example in the document "Materials for retraining on state management", Vol. I. Government administration and administrative technology, Science and Technology Publishing House, Hanoi, 2009.

#### Figure 12: Detailed policy cycle with 8 steps by Bridgman and Davis

The Australian Policy Handbook [132] divides 3 steps of the policy cycle into further details thus describing an 8 step policy cycle. The steps in the policy cycle according to these Australian scholars include: 1) Identify issues; 2) Policy analysis; 3) Policy instruments; 4) Consultation; 5) Coordination; 6) Policy adoption; 7) Implementation; 8) Evaluation.



problem (policy analysis step), develop policy options and measures to resolve the problem (policy instrument development step). In the policy cycle, policy analysis can be considered the most important step [113]. Policy analysis requires expert staff with adequate competencies, information, evidence and time to analyze and develop policy options.

Policy options should be presented openly for consultation to get comments and advice from stakeholders, including experts, research organizations, health agencies at all levels, population from different geographic areas, socio-economic status, service providers, etc. (consultation step). The consultation step ensures gathering of feedback from all relevant stakeholders, from experts to beneficiaries (the people and health care service providers) and managers, officials in order to gather information and evidence needed for selecting the optimal policy alternative.

The "coordination" step includes discussion, negotiation, consensus building of relevant ministries and other agencies in order to ensure responsiveness of the system, adequate financial resources to implement the policy options.

Policy options, after they have been refined through the process of consultations, are then submitted so that agencies in charge of the relevant jurisdiction of the policy subject matter can select, approve and issue them. This is the policy adoption step. The capacity, skills and tactics for defense and persuasion to pass policies play an important role, and affect the adoption of policy options by the relevant agency. The policy implementation step is the next step in the policy cycle; followed by the policy evaluation step.

Although it is the last step in the policy cycle, policy evaluation plays an especially important step. Policy evaluation, if implemented in a scientific and objective manner will provide information needed for the beginning a new policy cycle: evidence on strengths, weaknesses of the policy are gathered, analyzed, any problems detected serve as the basis for policy adjustments, or development of entirely new policy options.

The health policy cycle also includes the above steps; however, the health policy cycle has some special features. The scholars William Hsiao<sup>12</sup>, Marc Roberts, Peter Berman and Michael Reich proposed that while developing health policies, including health reforms, it is necessary to base it on a theoretical framework that consists of 5 health sector "control knobs". These include: *financing*-how to mobilize funds, use and pool financing mechanisms in order to achieve the goals of efficiency and equity; *payments*-Selection and use of provider payment mechanisms: *Organization; Government Regulations;* and *Behavior change* [93]. The above "control knobs" are decisive factors that affect performance of the health sector and can be adjusted using health policies. Thus, in order to resolve the problems of the health sector, policy solutions need to intervene to affect those "control knobs".

The policy cycle not only has the role of guiding through the steps of the policy cycle, but is also an instrument for analyzing and assessing policy-making. In this report, the policy cycle is also used to analyze problems in policymaking in Vietnam.

## 1.2. Evidence-based policy-making

Evidence-based policy is an approach that helps policy-makers make fully informed policy decisions by using the most reliable scientific evidence during the process of developing and implementing policies [115].<sup>13</sup> In this day and age, evidence-based policy making has become widely applied, ensuring effectiveness of policies.

Evidence-based policy making relies on the most reliable evidence, in contrast to the opinion-based policy-making, or reliance on small scale research that doesn't ensure the quality or reliance on opinions, subjective conjecture.

In reality, not all evidence from all research studies is reliable enough to serve as the basis for policy-making because of limitations in research design, research methodology, and research data gathering and processing. Therefore it is necessary to analyze the research context, strengths and weaknesses of each research study when using evidence from those sources.

Developing evidence-based health policies does not only rely on evidence from scientific studies, but also relies on practical experience, resources, social values, customs, habits and cultural traditions.

## 1.3. Assessing policy impact

*Policy or regulatory impact analysis (RIA)* is an important tool for policy analysis, assessment of solutions and policy options. RIA was first applied at the end of the 1970s. Currently all OECD countries and many developing countries use this tool in the policy-

 $<sup>^{12}</sup>$  W. Hsiao was the first person to propose 3 control knobs (organization, regulations, behavior); the other two control knobs were added later by other authors.

<sup>&</sup>lt;sup>13</sup> "an approach that helps people make well informed decisions about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation".

making process. In Vietnam, regulatory impact assessment is a required part of the policymaking process according to the Law on Promulgating Legal Documents (2008).

Regulatory Impact Assessment (RIA) analyzes the strengths and weaknesses, opportunity costs, cost-benefits, cost-effectiveness of different policy options. Based on results of the assessment, the RIA report proposes appropriate policy options with the lowest costs. RIA also helps in consultations with various interest groups concerned about a given policy. RIA helps to integrate and ensure consistency of different objectives of different policies (economic, social, environmental); in this way it helps to ensure the consistency and comprehensiveness of government policies.

This report will focus on assessment and selection of priority issues in need of solutions in some of the most important steps of the health policy-making process in Vietnam: That is the problem identification, policy analysis (identification of cause and developing policy solutions with widespread participation of stakeholders and advice from experts).

## 2. Situation of health policy-making

The policy cycle is used to analyze, assess the situation and issues that require priority for their resolution in health policy-making in Vietnam. As mentioned above, the presentation in this report will focus on analyzing and assessing the situation related to 2 steps: problem determination and policy analysis in the policy cycle.

According to Government Decree No. 178/2007/ND-CP regulating the functions, responsibilities, accountability and organizational structure of the Ministries and ministrylevel agencies and Government Decree No. 188/2007/ND-CP regulating the functions, responsibilities, accountability and organizational structure of the Ministry of Health, the Ministry of Health is responsible for developing policies in the field of health as follows:

- Draft laws, ordinances, resolutions, Government decrees;
- Strategies, master plans, long-term plans, 5-year plans, annual plans and national target programs, important programs and projects on topics under the Ministry of Health management jurisdiction;
- Decisions, directives, circulars on topics under the management jurisdiction of the Ministry of Health.

Policies in general and health care policies in particular are manifested in the form of Communist Party resolutions and documents and legislation. The process of developing and issuing legislation is regulated by the Law on Promulgation of Legal Documents and Government Decree No. 24/2009/ND-CP [116] regulating details and methods of implementing the Law on Promulgation of Legal Documents.

The Law on Promulgation of Legal Documents currently in effect stipulates the tasks in the process of developing legal documents, which are in fact the main contents of the policy cycle mentioned above. The Law assigns the specific tasks of the agency leading the drafting of legal documents, including the following tasks: (Article 33):

Review implementation of the Law, assess current legal documents related to the draft law, ordinance, or resolution; survey and evaluate the social context related to the main contents of the proposed and draft legislation. If necessary, propose to relevant agencies and organizations to take stock and assess implementation of legal documents in the fields for which those agencies or organizations are accountable related to the proposed or draft legislation.

- Organize regulatory impact assessment and develop RIA reports on the draft legislation. Contents of the RIA must mention clearly the problems that need to be resolved and solutions for each of those problems; estimated costs and benefits of solutions; cost benefit comparison across alternative solutions.
- Organize the soliciting of opinions from agencies and organizations related to the proposed or draft legislation; synthesize and study, and incorporate this feedback into the legislation.
- Prepare draft legislation, statement and detailed explanations to defend the proposed or draft legislation; report to respond to and incorporate the opinions of agencies, organizations and individuals; regulatory impact assessment of the draft legislation and make all documents public on the Government webpage or the webpage of the agency or organization leading the drafting of legislation.

To ensure the participation of stakeholders in contributing ideas to develop legal documents, Article 4 of the Law on Promulgation of Legal Documents stipulates the following:

"The Vietnam Fatherland Front and member organizations, other organizations, state agencies, people's armed forces units and individual people have the right to participate in contributing comments on draft legislation".

"In the process of developing legislation, agencies, organizations leading the drafting of legislation and other concerned agencies and organizations responsible for facilitating agencies, organizations, units, individuals to participate in contributing ideas on draft legislation; organize the soliciting feedback from people who will be directly affected by the legislation".

"Feedback on draft legislation must be studied, and incorporated during the process of revising draft legislation".

The role of research institutes, universities and non-government organizations, individuals participating in the policy development process are also stipulated concretely in the legal documents. Government Decree No. 24/2009/ND-CP regulating details and methods for implementing the Law on Promulgation of Legal Documents stipulates that during the process of drafting proposed or draft legislation, the lead drafting agency can mobilize the participation of relevant research institutes, universities, associations, unions, other organizations or individual experts and scientists with adequate conditions and competencies to participate in the following activities (Article 28):

"Take stock and assess the situation of implementing legislation; review, assess the legal documents currently in effect";

"Perform sociological surveys and investigations; assess the social context related to the proposed or draft legal document";

"Gather, study and compare materials, international agreements related to the proposed or draft documents to serve drafting legislation";

"Participate in regulatory impact assessments".

In this way, the legislative system related to promulgation of legal documents has created an adequate legal foundation for implementing the tasks in the policy-cycle, including the steps of problem determination and policy analysis.

#### 2.1. Achievements

In recent years, health policy development has improved substantially in selection of priority policy issues, has received increased investment in policy analysis, and expanded the participation in policy development and choice of solutions, methods for responding to the rapid changes in the economy, society, with an orientation to the goals of equity and efficiency in the health system.

Since 2007, the Joint Annual Health Review (JAHR) has been implemented on an annual basis, analyzing the situation of specific sub-areas within the health sector, determining priority issues and proposing solutions with the participation of many experts from Vietnam and international partners. The JAHR report is an important step forward in analysis of the situation and identification of priority issues in an objective way thanks to the participation of many stakeholders in the process of preparation of the report. The JAHR report has become a very useful reference for policy-making, and is recommended for even greater exploitation.

The application by the Ministry of Health of the Joint Assessment of National Strategies (JANS) instruments of IHP+ for the first time happened in 2010 and constituted an important first step in health strategy assessment analysis in Vietnam. This instrument was used to assess the 5-year plan of the health sector 2011–2015, with the participation of national and international consultants.

In recent years, the Ministry of Health has implemented research to study the impact of draft laws, following the regulations in the Law on Promulgation of Legal Documents in the process of draft law preparation such as for the Law on Health Insurance, the Law on Examination and Treatment and the Law on Food Safety.

The Ministry of Health has brought into play the ability of policy research institutes, specifically the Health Strategy and Policy Institute and some universities (Ha Noi School of Public Health, Ha Noi Medical University), in the process of policy-making. The Health Strategy and Policy Institute has actively participated in research, evaluations of certain policies (Study assessing the results of implementation of the financial autonomy policy according to Government Decree No. 43/2006 in some hospitals; assessment of hospital overcrowding and underutilization of capacity; assessment of results of implementing the secondment of medical personnel according to project 1816, regulatory impact assessment of the Law on Examination and Treatment and the Law on Food Safety).

Some workshops on major issues in the health sector, such as development of the district, commune and village levels of the health system, reforming the health system, have been organized by the leaders of the Ministry of Health, with the participation of officials, experts from the provinces, from inside and outside the health sector, in order to analyze the situation and propose policy issues.

The Ministry of Health has sent many missions to different localities to directly survey and rapidly assess the health situation in the locality, to gather information and evidence for policy-making.

Below is a list of examples of the most notable results of policymaking in the health sector in recent years:

• Determined priority policy issues in health care for the poor, ethnic minorities, children under age 6, policy on fee exemptions for health care for certain target groups covered by the state budget;

- Developed a policy to mobilize financial resources in order to improve the capacity of the district level through issuing government bonds;
- Developed a policy to strengthen health workers at lower levels of the system through the Law on Examination and Treatment and the Project 1816;
- Continue to maintain and develop national health target programs and preventive medicine programs;
- Organized the agencies charged with managing environmental health, food safety and examination and treatment;
- Developed and issued many guiding documents and implemented new policies such as the Law on Health Insurance, the Law on Food Safety,...;
- Developed drafts of policies of strategic importance, with intersectoral cooperation and a major impact on health, such as the tobacco control policy and policy on reducing harm from alcohol use,...

#### 2.2. Issues that need to be resolved

Despite the above-mentioned commendable progress, there remain many areas of policy-making that still need to be improved.

First, the capacity and long-term vision in policy-making remains limited [117]. Many policies have been slow to be reformed or have undergone reforms that don't get down to the fundamental problems, or lead to inconsistencies with other policies. The Vietnamese health system is at risk of facing the general problem of other developing countries that WHO has pointed out in the World Health Report 2008, that is the tendency for "*the health system to be left to drift towards unregulated commercialization*" [18], lack of integration of the treatment system and unbalanced development biased towards in-depth specialization.

This report focuses on considering, assessing policy-making with the chief aim to look closely at a few steps of the policy cycle, including identification of policy issues, policy analysis, developing options, consulting with experts and stakeholders, collaborating and deciding on policies. The problems in need of attention in the above steps are:

#### Limitations in identification of priority policy issues

Although many health policies have been developed in recent years to meet the urgent needs of society, most issues that have been put on the policy-making agenda of the health sector arise from existing orientation set by the leadership, and not many items have been put on the policy agenda based on results of policy research by independent research agencies, nor from the comments coming directly by people using health services.

The number of studies undertaken by research agencies assessing results of implementing current health policies assessing satisfaction of the people with health services is small, and the scope of research tends to be narrow. The number of research units focused on policy research is also quite limited. Many major and urgent issues such as primary health care in the 21<sup>st</sup> century, the structure of health service delivery, private health sector, health technology assessment, systematic reviews of cost-effectiveness studies to select drugs for treatment,... have not yet been put into the plans for policy development.

Performance goals of the health system [93], including i) improving health status of the population; ii) satisfaction of the people with the health system; and iii) the protection of the people against financial risks related to illness are not always considered the ultimate criteria in policy-making nor in reviewing policies. This is why, policies that are very

effective on public health (such as tobacco control policies), have been slow to be developed and issued; satisfaction of the people has not been assessed adequately; there are policies that have led to increased financial burden on the people when they are sick (lack policies to ensure cost-effectiveness in health service provision, slow to develop and implement policies for managing drug and medical consumables prices).

Sometimes in the process of developing policies, inadequate attention is paid to ensuring sufficient resources for implementation (funds, staff, organization, system capacity, etc.), leading to the situation in which some policies are issued but not implemented.

#### Limitations in determining the cause of the problem and in policy analysis

While some important issues have not yet been recognized and put into the plan for policy-making, other policies have been issued that contain inconsistencies, that lead undesirable or even opposite results of what was intended. For example the policy on hospital autonomy encourages hospitals to admit more patients to increase income, while the objective is to reduce overcrowding of hospitals; the process of developing the list of drugs covered by health insurance at present is not based on the rule of cost-effectiveness, yet the goal of the health insurance policy is that the health insurance fund should be used sustainability and effectively. The above situation arises from limitations in use of evidence and practical experience, use of lessons from successes and failures of other health systems in policy making process.

First of all, studies analyzing and identifying policy issues have not yet been implemented thoroughly, and have not yet identified all underlying causes for the problems in order to propose appropriate policy solutions. For example, according to the current health insurance policy, the near poor are to be provided with support in the amount of at least 50% of the health insurance contribution amount, yet only 11.2% of the near poor currently participate in health insurance, yet there has not yet been a study to determine in a convincing manner the reasons the near poor are not complying with health insurance as required by law and then proposing necessary measures. Overcrowding is widespread in all healthcare facilities over many years, yet before 2010 there was no research providing adequate evidence on the main reasons for this situation (because of the impact of hospital autonomization policy according to Decree 43, and because the system of service provision is inadequate to meet demand, or because capacity of the primary health care system). There is a lack of adequate analysis based on reliable evidence, especially inadequate consideration of health financing, provider payments, health service delivery organization, management instruments and behavior change (5 "control knobs", so in some cases effective policy solutions have not been proposed.

In the process of developing policy options, policy makers have not yet taken the approach nor have they invested adequately in research of successes and failures in other countries, especially consideration of best practice in countries that have socio-economic conditions similar to Vietnam in order to develop appropriate policy options.

Even though regulatory impact assessment of draft policy documents has been stipulated in the Law on Promulgation of Legal Documents (2008), implementing of regulatory impact assessment in the health sector in recent years has not been paid adequate attention. The Ministry of Health has not yet invested the needed resources (human, time and funds) for regularly impact assessment (for example the time allowed for implementation of a regulatory impact assessment in the Law on Food Safety was only 2 weeks). The opinion has been raised that almost all RIA reports for law development projects are "superficial, cursory, and impressionistic" [118]. That is something that the health sector needs to take to heart. Results of regulatory impact assessment at times are not exploited and used effectively to explain, achieve consensus, and choose optimal policy options. For example, analysis and assessment of the option of re-issuing medical practice licenses was not used to convince agencies involved in approving the law to choose the most appropriate alternative, instead they chose the option of issuing permanent licenses one time.

## Participation of stakeholders in giving advice on policies has not been as effective as desired

The Law on Promulgation of Legal Documents currently stipulates the requirement to organize the seeking of advice and opinions and contributions of stakeholders in the process of developing legal documents. However, implementation in practice faces many limitations. The most common approach to gather feedback for draft policies is to send the documents to stakeholders, organize workshops to obtain comments, and these have not achieved the desired results. Opinions contributed are primarily from state governance agencies (departments, administrations ministries, provincial health bureaus) and from some agencies providing health services directly managed by the Ministry of Health), with few ideas contributed from policy research organizations and agencies and very little feedback directly from the people who use health services in different regions, and among different demographic groups, especially groups implementing and groups benefitting from policies.

The seeking of feedback direction from the people currently is implemented mainly through posting draft policies on websites. However, feedback on draft legal documents obtained from this mechanisms are scanty. Some people consider the main reason for this is that supporting information on the draft policy posted on the website is insufficient for readers to be able to give feedback. Besides the sending of draft documents to organizations to obtain feedback and organizing workshops, seminars, there are no other ways that feedback is solicited (no blue books, white papers, in the health policy area).

A study by the Health Strategy and Policy Institute also showed that participation in providing feedback to draft legal documents by Ministry of Health departments and administrations, as well as from other ministries and sectors, in many cases is superficial, because the staff assigned to respond are overburdened, and because there is not yet a mechanism to ensure accountability in implementing these tasks [119].

While the role of stakeholders has not yet been brought fully into play in advising policies, available information and evidence has not yet been fully exploited for analysis and proposals for policy solutions. For example, there is not yet a strategy to strengthen capacity of commune health stations for implementing primary health care for non-communicable diseases, yet there is abundant evidence indicating that non-communicable diseases account for the largest share of burden of disease; there is a lack of solutions for health service quality management in the private health sector, while data from over 10 years ago indicated that over 60% of outpatient services are provided by the private sector.

## Issues in policy decision-making

Accountability in decision-making about policy options is unclear. There is no mechanism to ensure individual responsibility regarding the impact of policies that are issued. Some policies have been out of date for a long time, but are slow to be revised or amended to make them appropriate, such as the policy on partial user fees according to Decree 95-CP from 1994, which has led to the need to get around the rules in order to collect as many revenues as possible, leading to escalation of prices of some hospital services and costs to the people.

Policy advocacy activities to achieve consensus among stakeholders has seen much progress, but in many cases has not yet been developed and implemented in a strategic manner, with appropriate explanations and defense, so consensus has not been achieved in choosing the optimal policy option (for example, dropping the option of reorganizing the health insurance system in the Law on Health Insurance, issuing licenses only one time for life in the Law on Examination and Treatment)

Selection of staff based on having adequate prestige and qualifications in negotiation to advocate and deliberate about policy options; lack of appropriate forms and depth in exchange of ideas among stakeholders with conflicting opinions in order to negotiate and achieve consensus (for example, re-licensing of medical practice in the Law on Examination and Treatment).

#### **Resources and policy-making process**

Policy-making capacity is one of the most important factors determining the success of policy-making. Even though the Ministry of Health always attaches much importance to the necessity to ensure resources for policy-making, up till now, the health sector still lacks experts with strategic vision, with the ability to effectively analyze alternatives, identify the deciding issues, propose priority issues to put into the policy-making agenda.

Even though in recent years the Ministry of Health has strongly promoted participation and contributions of high level health experts in policy-making, there is not yet a way to gather informed opinions and effectively mobilize the participation of these experts in health policy-making at a strategic level.

The number of professional health policy research organizations remains very limited. In the entire health sector, there is only one unit specialized in implementing policy research (Health Strategy and Policy Institute); the role of universities and other institutes in policy research activities remains unclear. Most research assessing policies is still performed by Ministry of Health departments and administrations, even though officials in the Ministry of Health are always overburdened because they have to concurrently micromanage service and other units directly under the administration of the Ministry of Health. Moreover, research policy analysis in some areas requires specialized skills beyond the scope of public sector managers.

On the other hand, the collaboration in participation between departments and administrations within the health sector and outside the sector has not yet achieved effectiveness; ideas contributed on draft policies lack depth of understanding, while in many cases they tend to be superficial due to a lack of information, evidence in the policy area being developed combined with the overburden on the officials of the sector and Ministry of Health. As a results policies are not receiving adequate participation in terms of widespread feedback from experts in different fields.

Although the Law on Promulgation of Legal Documents stipulated a framework process for submitting draft legal documents to authorities for approval, the Ministry of Health has not yet provided detailed guidance to units under its management leading to differences in policy making in different departments and administrations. Consequently, during policymaking it is difficult to mobilize effectively the existing resources, exploit all information and evidence, and hard to ensure complete implementation of all steps in the policy cycle, especially policy analysis and consultations. Financial resources and financial mechanisms for policymaking are limited, inadequate to cover necessary assessment studies. Policy-making activities are fragmented, lack resources, lack long-term vision.

#### Evaluation in the policy cycle

In recent years, some newly issued policies have been assessed in the early stages of implementation (for example activities assessing implementation of the Law on Health Insurance from different perspectives was implemented in the first year of implementing the Law). Most health policies have been assessed periodically through mid-year or end of year reviews of health sector activities. Nevertheless, checking and assessing policies is done too infrequently, mainly by assigning responsibility to local authorities or to the health sector at different levels, or based on reports from management agencies and health service providers. Few policies have been assessed regularly by professional research agencies, using scientific evaluation and survey methods, with instruments designed to assess all criteria of policy performance.

Up till now, besides limitations in accuracy, completeness and recentness of health information, monitoring and evaluation indicators have not yet been completed and made consistent, there is a lack of information sources for updating and they have not yet been used to assess effectiveness of each health policy based on the most important objectives of the health system (health status, satisfaction and financial protection), with an orientation towards equity and efficiency.

## 3. Selection of priority issues

Among the issues mentioned above, the following issues need to be prioritized for resolution in order to refine the development of policies appropriate with the goals of equity, efficiency and development in the health system.

## 3.1. Issues in development of the policy-making agenda

- Some strategic level policy issues, of particular importance for equity, efficiency, quality of the health system have not yet been included in the policy-making agenda. There is not yet a comprehensive agenda for development of policies, strategies and operational mechanisms to meet requirements for reform and to strengthen the health system in the context of the market economy, and many policies have multi-dimensional impacts on health activities and are creating increasing gaps between the poor and the rich
- Some policy instruments that could have decisive impact on the safety, quality and efficiency of the system of health service delivery but have not yet been developed or have been developed but do not yet meet requirements in the orientation of the health system (for example, health technology assessment, accreditation of quality, medical practice licensing, provider payments ...).
- The people are not satisfied with many issues in health care, but no survey of their level of satisfaction has been made to assess effectiveness of the health system in developing and adjusting health policies.

## 3.2. Problems in policy analysis, policy advice

• Limitations in advising, policy analysis, leading to conflicting policies and undesirable effects of those policies.

- There are not yet any concrete regulations to ensure policy options must be developed based on evidence, and based on results of analyzing all factors that have a role in fine-tuning the health system.
- In the process of policy analysis, policy options are developed, but experience (both successes and failures) within Vietnam and from overseas are not always considered carefully;
- Activities to analyze new policies are only implemented on a narrow scale, lack widespread and active participation of experts and representatives of stakeholders.

## **3.3.** Issues in use of resources and development of policy cycles that ensure the participation of stakeholders

- Functions, tasks of health management apparatus are not yet up-to-date or adjusted to be in line with major changes in the health system (such as implementing autonomy in public hospitals, the rapid development of the private health sector, rapid changes in the health financing structure and mechanisms). The officials working in the Ministry of Health are overburdened, and there is a shortage of personnel with skills to meet requirements of managing the health system in general and for policy-making in general.
- There is not yet an appropriate form and mechanism to mobilize effectively the ability to provide policy advice among the experts within the MOH and outside. There is not yet active and effective participation of stakeholders in policy-making;
- Resources from international organizations have not been selected, used and exploited effectively; there is a lack of attention paid to opinions, advice, and other valuable contributions from experts.
- There is a lack of mechanism to ensure accountability of individuals, organizations in policy-making and deciding on policy options.

## 4. Recommendations

In order to gradually resolve the above mentioned priority issues, the report makes the following groups of recommendations below (for details see Chapter 12):

- Develop and implement a comprehensive program for policy and strategy making over the next ten years.
- Organize a network of policy research agencies and units, and groups of policy advisor experts.
- Develop a detailed process for health sector policy formulation. Develop and pilot test a standard process for regulatory impact assessment (RIA).
- Improve the quality of policy analysis and ensure the participation of many experts working in the field while drafting policy options.
- Strengthen capacity for developing policies within the Ministry of Health, prioritize resources for macro-level management activities – developing policies, reducing direct administrative duties related to health service providers directly under management of the Ministry of Health.
- Place improving the policy formulating process as one of the priority issues for cooperation and dialogue between the Ministry of Health and the Health Partnership group.

# Chapter 10.2: Strengthening Health Sector Management and Policymaking

The Vietnamese health sector is undergoing renovation. This process requires strengthening capacity of health sector managers in many aspects, especially policy-making capacity, in order to resolve effectively the many complex and new problems that are occurring in the health sector while ensuring the principles of equity, efficiency and development [120].

This chapter has the task of assessing the situation of training, retraining of health sector managers to improve capacity for policy making, and from there to determine priority issues and suitable solutions.

## **1. Overview of the situation**

#### **1.1. Achievements**

In face of the demand to renovate health system governance, the health sector managerial officials have received training and retraining to strengthen their capacity through various programs and forms of training and retraining, such as short-term training (retraining by the Ministry of Health and other projects), long-term training (specialist type 1, specialist type 2, master's, doctorate in public policy, hospital management, health sector organization and management) [121; 117], and training and retraining courses on political-administrative reasoning at all levels for different levels of government staff in the health sector according to general regulations.

The Ministry of Health has plans for implementing Government Decree No. 18/2010/ND-CP on training and retraining of government officials, with contents covering knowledge of legislation, knowledge and skills for general state management and medical/pharmaceutical sector management. The Ha Noi School of Public Health and the Ho Chi Minh City Institute of Hygiene and Public Health are two units to which the Ministry of Health has assigned responsibility to implement training and retraining of public officials to strengthen knowledge of health sector management. In the past few years, under the direction of the Ministry of Health Retraining Committee, with the chairmanship of the Vice-Minister of Health, the Organization and Manpower Department, and the Science and Training Department, many materials of the retraining program have been reviewed and issued by the Ministry of Health, for example the hospital management principles program, health planning, leadership [121].

Among the current university training programs, only the Bachelor's in Public Health provides instruction on health policies. Students are introduced to the policy cycle and practice certain skills like developing fact sheets. Besides formal programs, many short-term programs related to strengthening capacity for policy-making have been organized. For example, the Ha Noi School of Public Health has organized many short-term courses, collaborated with Population Reference Bureau (PRB) with funding from the Ford Foundation on policy communication. In that course, trainees practiced skills in presentations, transmitting information to policy-makers in appropriate forms such as policy briefs. The school also collaborated with the Centers for Disease Control to organize courses to improve skills in undertaking systematic reviews.

Many research institutes, universities and individual researchers have research, surveys that are very valuable and contribute to providing evidence for policy-making such as

development of the 5-year plan of the health sector 2011–2015 [25]; development of the Safe Motherhood Strategy 2003–2010; development of the National Action Plan to Improve the Health of Youth and Adolescents 2006–2010 [122], report assessing results of implementing Decree 43 and the overcrowding of hospitals written by the Health Strategy and Policy Institute in 2010.

Results and achievements from training, retraining to strengthen management capacity in general, and policy-making in general has contributed importantly to development of and issuing of many new legal documents, policies, strategies, plans and implementing circulars related to organization, professional medical issues, etc. in the health sector in the past few years.

## **1.2. Difficulties and shortcomings**

#### 1.2.1. Capacity of the health sector managerial staff in policy-making remains limited

Evidence based policy making that ensures consistency between policies is still weak at the level where policies are issued and the capacity for implementation, monitoring and critiquing policies at lower levels remains limited, especially in more disadvantaged provinces [123].

There is evidence that indicates that stakeholders participating in developing policies in many cases did not understand clearly the policy-making process, used evidence considered unreliable, did not consider comprehensively all financial, human, service delivery factors when proposing the policies leading to hardship in policy implementation. In addition, inadequate attention was paid to proposing alternative policy options and in testing policies prior to their issuance [122; 124].

Information processing capacity and use of evidence to serve policy-making remains limited for many reasons. For example, policy recommendations are not convincing or are not evidence-based, or are based on personal management experience or political interests. The ability to exploit and analyze existing data systematically in order to give systematic policy advice is weak [125]. Currently data used for policy-making are primarily data from the health sector itself. Use of information from national surveys implemented by the General Statistics Office or other sectors is somewhat limited [122; 125].

Intersectoral coordination, policy advocacy (including communicating information to the people on policies about to be issued such as the user fee policy...) is inadequate. Convincing stakeholders to participate in the policy-making process when proposed by the health sector and in achieving agreement. Participation of experts in other sectors, from social organizations (sociology, economics, professional associations...) in the policy-making process remains somewhat limited [123].<sup>14</sup> The situation in which "... there is a lack of effective leaders and managers, leading health officials, officials with high levels of qualifications, with the ability to predict and deal effectively with complex problems that arise...", as stated in the 9<sup>th</sup> Session of the Central Committee of the Vietnamese Communist Party [41], is also a major problem that needs to be considered within the health sector.

The capacity to implement policies remains weak at the district and commune levels, especially with the granting of autonomy to facilities that has occurred over the past few years. Managers face many difficulties in management of finances, human resources and medical equipment at the lower levels because most of them are trained in medical fields

<sup>&</sup>lt;sup>14</sup> For example, in developing the Law on Food Safety, coordination between the health sector and other sectors was quite passive.

(doctors, pharmacists), and have not received training in management. The report on implementing of Decree 43/2006/ND-CP on autonomy and accountability in state service facilities and the situation of overcrowding, underutilization of hospital system indicates that implementing Decree 43 has brought many benefits to hospitals, such as increased revenues, increased investments in high tech medical equipment, increased volume of medical services provided. However, implementation of Decree 43 has also entailed many limitations affecting the goals of equity in the health system [62; 126].

Implementation of tasks required under the Law on Promulgation of Legal Documents such as Regulatory Impact Assessment (RIA), reviewing the status of implementing legislation and assessment of current legal documents, remains limited [117].

Capacity for monitoring and verifying implementation of regulations on private medical and pharmaceutical practice remain weak at the district and commune levels [126]. Besides annual meetings held by the Ministry of Health to discuss the private medical and pharmaceutical sector, update people on new regulations in this area and report on the situation, state management agencies in the health sector have not yet become deeply involved in supervising quality of private health services.

Capacity for planning implementation of health policies among district and commune level health officials remains limited. Officials in state management agencies in the health sector are still influenced by the way of working under the centralized subsidized mechanism, and are accustomed to activities in service provision based on top-down approaches.

## **1.2.2.** Capacity for providing a scientific basis and evidence for policy making faces many difficulties

Besides limitations in capacity of officials with main responsibility in the policymaking process at all levels, capacity of the supporting network of experts among research institutes and universities who are providing evidence for policy-makers and laying out recommendations on policies also faces many limitations. Provision of scientific evidence for policy formulation relies heavily on the Health Strategy and Policy Institute, while other institutes and universities are seldom involved.

Currently evidence provided by research does not yet satisfy requirements of policymaking, because information does not yet satisfy requirements for representativeness, comprehensiveness, accuracy and timeliness. Sometimes information provided is inappropriate (too detailed and academic, not yet synthesized and lacking an orientation towards policymaking) [127]. Capacity to transform research results into policy recommendations in the form of fact sheets or policy briefs remains weak [128]. Dissemination of research findings remains limited, up to 50% of research establishments organize dissemination of only 1 research study per year, and 21.4% have never organized the dissemination of their research [128].

Research capacity of research establishments that specialize in providing evidence to the Ministry of Health and other policy-making units remains limited because researchers have not been trained to strengthen their capacity on a regular basis, research conditions are lacking (funds, laboratories, access to information needed for research, information about policies is weak, lack of understanding of the policy cycle...). Working conditions and environment have not yet created a motivation to encourage, attract, bring into play capacity, dedication of policy researchers.

According to a survey of the Health Policy and Strategy Institute, in the past 3 years, 17 out of 18 managers who participated in research had never attended training on research

and evidence-based policy-making. Up to 50–80% of research establishments only satisfy from 50–80% of required conditions for research, and only 50% of these units had computers with access to the internet, and 55.6% admit that they have difficulty in accessing information and data for research. Funds for research are still very limited. Only about 21.5% reported that 80% or more of their funding needs are met [128].

Currently there is a severe shortage of databases providing information and evidence for policymaking. In addition, access to information currently remains difficult for many reasons, for example: There is no database archive system for Vietnamese research studies because many studies are never transformed into formal publications (journal articles, printed reports); The Ministry of Health does not have a library for archiving these materials (in paper or electronic form). Officials don't use information regularly because they lack capacity for analysis and use of related evidence. Research implemented in Vietnam is seldom used by policymakers [129].

## **1.2.3.** Training and retraining to strengthen managerial capacity faces many shortcomings

Although the Ministry of Health has a Retraining committee and implements many activities, still the retraining programs lack contents on policy-making. Many other units and projects have also organized short-term training courses with related contents such as planning or project management, but the quality of training and capacity of instructors does not yet meet requirements [121]. Many health officials have received training in political reasoning or administration, but this program is general for all sectors, and still doesn't contain contents on policy-making, monitoring and evaluation of policy implementation.

According to reports from Ministry of Health departments and administrations, the only training that has been organized is on specific professional responsibilities of the unit, and not on improving capacity for policy-making for Ministry of Health officials in the period 2009–2010. This is the case even though the reports of the departments and administrations do mention the issue of weak policy-making capacity leading to many shortcomings in issuing and implementing policies.

Currently the Ministry of Health does not yet have a training/retraining plan and program to strengthen capacity for policymaking for officials involved in this work; there is not yet a project with major investments in strengthening capacity for policy making in the health sector. Among over 100 projects supporting the health sector in the period from 2000 to the present, there were only 5 projects with the objective related to policy-making, but these were primarily focused on units in the provinces and in specific narrow areas of the projects. There has not yet been a project with the objective of strengthening capacity for policy-making in a systematic way for the health sector [130; 131].

At the central level, currently there are only a few projects focused on improving capacity for policymaking, however they have only just begun and are small in scope. For example, Evidence Informed Policy Network (EVIPNET project funded by WHO that has been completed), or the project for strengthening evidence-based policymaking (funded by AusAID). Effectiveness of these projects has not yet been determined.

International cooperation in training and retraining for policy-making remains limited, and has been limited to a few high level officials attending training in a Flagship course on health reforms in 2010.

### 2. Identifying priorities

#### 2.1. Training, retraining to strengthen capacity for evidence-based policymaking for health sector management officials does not yet meet requirements

- Currently there are not yet training courses on policy-making organized in a systematic way for key officials (problem determination, prioritization, policy development, implementation, monitoring and evaluation.)
- Health officials have not yet been trained in monitoring implementation of policies, especially regulatory impact assessment, and monitoring and evaluating policies related to the private sector at the lower levels.
- Hospital management staff have not yet been trained or accumulated adequate skills needed to manage hospitals effectively to ensure the goals of equity, efficiency and development of the health sector especially in the context of implementing Decree 43.
- Health officials at lower levels have not yet received training to strengthen capacity for planning to implement policies, nor to provide feedback on results of implementing policies.
- There is not yet a program, plan or project making a major investment in strengthening capacity for policy making in the health sector. Currently one sees only a few projects with a narrow scope and results have not yet been evaluated.

# 2.2. Capacity to provide evidence for policy-making among research establishments and researchers who advise on policies does not yet meet requirements and has many limitations

- The Health Strategy and Policy Institute has made many efforts to supply scientific evidence for policy formulation, but there are still many limitations. Institutes, universities and individual researchers have not yet provided appropriate evidence for policy-making or policy recommendations because of weak capacity in implementing research, analyzing data, writing reports, advising on policy options, transforming research results into appropriate communication messages and forms such as policy briefs, fact sheets, etc.
- There is a lack of adequate conditions to implement research of good quality in order to provide convincing evidence for policymaking due to a lack of funds, laboratories, lack of proper orientation on research questions, lack of data or lack of access to information.

## **2.3.** Information system to serve management and development of policies is weak

Some key orienting policies and resource allocations for the health information system are lacking. The completeness, reliability, timeliness of the health information system are still problematic and need resolution. The system for gathering and processing information are still not effective. Health statistics indicators are not yet updated in line with the needs for monitoring and evaluation of the 5-year plan. Information to serve forecasting, early detection of problems in the process of planning and policy making are still weak (such as was mentioned in JAHR 2010).

 Consideration of successful experience and failures of other countries in order to strengthen capacity for policy making in the Vietnamese health system is not yet done adequately.

#### 3. Recommendations

In order to gradually resolve the priority problems mentioned above, the report recommends the following sets of solutions (for details see Chapter 12):

- Strengthen training, retraining of policy-making capacity.
- Strengthen capacity to provide evidence for policy-making.

### **Chapter 11: Conclusion**

The Joint Annual Health Review (JAHR) 2011, produced in the first year implementing the 11th national party congress, and five-year health sector plan for the protection, care and improvement of people's health 2011–2015, has reviewed health policies and orientations for coming time; updating health status and determinants; updating the health care system with focused analyses in health financing and health system governance.

Major findings of the report are reflected in the sections below.

#### 1. Overview of major orientations of the health sector

In the next 5 years, the operation and development of the Vietnamese health system will be facing both major advantages and new requirements and challenges.

Economic growth and improved cultural and living standards will pose positive influence on the people's health status, and bring opportunities to investments in health. The Vietnamese health system, however, will be faced with apparent challenges, such as: increasing non-communicable disease, injuries, accidents while infectious, new and strange epidemics are unpredictable. Increasing risk factors also influence negatively on people's health. Renovation and strengthening the health care system toward equity, efficiency, development and quality in the market economy context with multifaceted policy impacts in health care activities, and widening rich-poor gap are also a great challenge.

Pursuant to the 11th Party congress document, major orientations in health sector include: a) continue to "comprehensively reform", making contributions to realizing social equity, securing social protection, improving quality of life; b) lay a firm groundwork for new development stages of the health sector when Vietnam becomes in industrialized country toward modernization; c) enhance quality of life (quality of human resource, service quality), raise performance efficiency, mobilize and use effectively the resources; d) realize social equity in health care in this constraint context and the equity must be reflected in specific sectoral mechanisms and policies. More specifically, the health sector needs to organize well their tasks of "Promote health care cause, improving quality of people's health care work" as pointed out in the strategy for socio-economic development in the period 2011–2020, and specified in the five-year health sector plan and the strategy for the protection, care and improvement of people's health.

Vietnam will continue its commitment with international community, and respect references and lessons learnt from other countries, including many lessons and experiences complied and recommended by the World Health Organization and other organizations, such as health-related Millennium Development Goal (MDG); strengthening the health care system by six components; reform in the concepts and approach in primary health care; mobilize and effectively use financing sources to realize "universal healthcare coverage"; specify objectives of the pharmaceutical sector and apply good practice standards; enhance productivity of health workforce; strengthen health management information system; rational use of medical equipment.

The primary tasks of Vietnam's health sector in the near future were set out by the Minister of Health, including: (i) Reducing overcrowding of higher level hospitals; (ii) Reform the financial mechanism in state health facilities; (iii) Implement the roadmap for universal health insurance coverage; (iv) Strengthen the grassroots health network; (v) Strengthen health human resources development, gradually meet the basic need for health

workers at all levels; (vi) Implement in state health facilities on a pilot basis medical examination and treatment services with improved "hotel services" for those able to pay; (vii) Increase effectiveness of health information and education.

#### 2. Health status and determinants

In the context of socio-economic constraint, health targets of Vietnam have been obtained even surpassed the target on average life expectancy (72.8 years); Infant mortality rate has fallen to 16‰; under five mortality rate has fallen to 25.0‰; maternal mortality rate has fallen from 165/100 000 live births (2001–2002) to 69/100 000 (2009). Malnutrition rate for children under 5 of wasting (18%), stunting (29.3%).

Even though substantial achievements have been made, there are still rather large disparities in health status across regions, between demographic groups and living standards groups. Admission rate of infectious disease group fell to 22.9% in 2009 while non-communicable diseases group is on a rise (66.3% in 2009). Accidents, poisonings, injuries remain steady at over 10% of admissions.

Many dangerous infectious diseases are at risk of reoccurring such as cholera, malaria, dengue fever and some emerging diseases (SARS, A(H5N1), A(H1N1), streptococcus suis, hand-foot-mouth, rubella, E. coli, animal-to-human transmitted diseases).

Transportation exchange, population dynamics, immigration, environmental pollution and unhygienic practice of a big segment of population have contributed to wide outbreak of epidemics, especially in epidemics with high speed of transmission.

In the context of industrialization, urbanization, migration and international integration, risk factors negatively affecting health are on the increase like lack of safe water, people's awareness of keeping sanitation is poor, lack of food hygiene and safety, environmental pollution, lack of traffic safety, work accidents, disease transmission especially HIV/AIDS due to drug addiction, prostitution, lifestyle issues like smoking, alcohol abuse, unsafe sex, domestic violence ... Population size is big with high population growth rate, increasing migration and climate change ... cause many health problems. Sectoral collaboration in solving public health problems and preventive medicine remain limited. People's awareness of traffic safety, work safety, food hygiene and safety is limited. Behavior change communications related to lifestyle are not paid due attention and ineffective.

#### 3. Health human resources

The 11th party congress set forth the goal by 2020 obtaining 9 doctors per 10 thousand people, strengthening training and improving training quality, medical ethics and responsibilities of health workers. The Law on Examination and Treatment, effective since 2011, regulates that health practitioners must possess practice certificate and continuously update medical knowledge.

The number of health workers has increased substantially over the past 10 years. The number of doctors per 10 thousand population increased additional 0.07 (from 6.52 to 6.59), the number of nurses per 10 thousand population also increased (8.82 in 2009 vs. 7.78 in 2008). The number of pharmacist per 10 000 population (excluding pharmacist in the production and distribution enterprises) is 0.38, if we include pharmacists in the manufacturing and distribution domains, this ratio was 1.78 in 2009, much higher than the figure for 2008 at 1.22). The number of university-trained and post-graduate workers stay steady. The proportion of commune with a doctor increased to 67.7%, vs. 65% in 2008. Some

95.7% of commune heath stations have a pediatric/obstetrics assistant doctor, 97% of villages have health workers.

The network of health worker training covers 25 schools/university faculties, 34 junior medical college and 42 pharmaceutical secondary school. In addition, there are 6 research institutes, 7 teaching hospitals. The number of student admitted has increased substantially: In 2011 the admission quota for university was 16 905 students, while for post-graduate education in 2011 the admission quota was 6248 students.

Training of health human resource for disadvantaged regions continues to be implemented. Refreshment and upgrading of professional knowledge for health workers is done in a regular basis focusing on political theory, the state administration and technical skills. Some projects, proposals investing in regional health care systems include component on retraining, continuing training for health workers. Medical schools and big hospitals often organize training courses on orientation specialty, and advanced techniques. Short-term training courses overseas have also been held but with limited number. Some loan and grant projects and programs for human resource development are also undergoing.

Difficulties, shortcomings: Some health workforce indicators are lower than the targets. In 2009, the number of doctors per 10 000 population was 6.59 (target at 7), the number of university-trained pharmacist per 10 000 population was very low (0.38), target at 1.2 (if we include pharmacists working in manufacturing and distribution, the ratio is 1.78). The ratio of nurse to doctor increased very little (1.2 in 2008 and 1.27 in 2009). Irrational distribution of health workforce by region, area remains a pressing problem. The Mekong Delta and the Central Highlands still have the lowest proportion of doctors per 10 000 population (4.5 and 4.8). In flatland, and urban area, health workforce increased in all three levels. In mountainous provinces, human resource increased at provincial and district level while the communal level stayed unchanged even declined. Low income is a major cause of shortage of health workforce and irrational distribution, migration of health workers in some locations and area of discipline. Although targets of human resource training increased, distribution of health workers across socio-economic sectors remains inappropriate. The degree of moving and changing of work place of health workers in Vietnam is quite low but the movement is one-way from lower to higher level, rural to urban. Management, use and remuneration for health workers remain very limited. The Ministry of Health is not yet able to manage the number of health workers in the private sector. Further training and upgrading professional skills for health workers is facing some difficulties: Health workers at CHS have fewer chance to be trained than provincial and district workers; health workers in curative care is more regularly trained than those working in the preventive medicine.

Pre-service training of staff remains problematic. Over the past 10 years, the number of new students increased every year, about 10% on average, even by 26% [44], in some years, but physical facilities and teachers of these schools developed incommensurately. There was a sharp increase in recruitment of secondary medical students. In 2010, total target for training was 66 680, in which nurse accounted for 21 787 and secondary pharmacist was 24 915. However, the issue of concern is that quality of training is below expectation and many graduates are unable to find a job, causing huge waste for the people and the state. Training program and teaching methods are not updated lacking teachers, training materials, physical facilities and budget for the training.

#### 4. Health financing

Since 2010, there is no major policy change in health financing. The 11th Party Congress continued to point out the orientation "Increase the state investment in line with

promoting social mobilization for health care activities." Some important policies for health financing are under drafting process, collecting comments such as the Decree on reforming operation and financing mechanism in public institution, the draft Circular revising Circular No.14 on adjustment of some service prices, draft Circular guiding implementation of the Decree No. 69 in health care...

Total health spending of Vietnam has shown a clear increase, reaching 6.4% as a share of GDP (2009). Average annual per capita health spending rocketed from 21 USD in 2000 to 76 USD in 2009. The share of state budget spent on health increased from 3.9% in 2000 to 8.2% in 2009. In the period 2008–2010, the rate of increase of state budget spending on health was 25.8%, higher than the rate of increase of the general state budget spending (16.7%), achieving the target of ensuring "the pace of increase of state health spending is higher than the pace of state budget spending" according to National Assembly Resolution No. 18/2008/QH12. The public spending share in total health spending increased substantially in recent years, from 27.2% in 2005 to 43.3% in 2009. The proportion of household out-of-pocket payment in total health spending, although still high, has dropped from 65% in 2005 to 49.3% in 2009, as a result the private share of total health spending is falling.

The state budget is allocated and used centrally to serve the main governance functions in health care, to reach public health objectives. The proportion of spending on preventive medicine as a share of the state budget for health exceeds 30%. Increasing effectiveness in use of the state budget is one of the priorities in health financing. Efforts to reform provider payment methods are being undertaken with a view towards controlling health care cost escalation and enhancing effectiveness in resource use for medical examination and treatment.

Difficulties, shortcomings: The ability to maintain state budget spending for health above 10% of total state spending may face great barriers due to current macroeconomic problems, especially reductions in funds available from issuing government bonds for the health sector in the next few years. Although private spending has declined (especially household out-of-pocket spending), it remains at a high level, affecting equity goals in health care for the people. Allocation of state budget to preventive medicine, grassroots health care, health care for mountainous, remote, isolated areas has been given priority, but remains low. The goal by 2014 to achieve universal health insurance coverage is facing many difficulties and challenges. Many health financing policies and mechanisms need to be adjusted soon (healthcare service price schedule, financial autonomy, social mobilization of health activities, etc.). State budget allocation for health care facilities is not vet based on performance and outputs, but remains primarily related to inputs (number of beds, number of workers). The provider payment mechanism is primarily fee-for-service, causing many negative effects (especially in relation to abuse of services). Monitoring and regulation of autonomous hospitals is not yet effective. Measures for containment of costs and reduction in household out-of-pocket spending for health care have not yet met expectations. Other provider payment mechanisms (capitation, package payments by diagnosis and DRG) are only in the pilot stage; progress in reforming provider payments remains slow.

#### 5. Pharmaceuticals, medical equipment and infrastructure

In 2010, The Ministry of Health issued many legal documents related to pharmaceuticals focusing on inspection of drug quality, drug quality management. The Ministry of Health also submitted to the Government a Master Plan for Pharmaceutical Industry Development by 2020, vision to 2030. the Ministry of Health submitted to the Government project on "Master plan for drug distribution to 2020, and vision to 2030."

The National Medical Equipment Policy to the year 2010 was approved. In 2010, the Government established a National Steering Committee on Medical equipment chaired by a Vice Prime Minister with the Minister of Health as Deputy chairman.

On medical infrastructure, the Government approved the project on building, renovating and upgrading district general hospitals and inter-district regional hospitals using government bonds and other legal funding sources for the 2008–2010 period (Prime Ministerial Decision No. 47/2008/QD-TTg) and approved the project on "Investments in construction, renovation and upgrading of specialized hospitals in tuberculosis, mental illness, cancers and pediatric care, and some other general hospitals in the mountainous and disadvantaged areas using government bonds and other legal funding sources for 2009–2013 period (Prime Ministerial Decision No. 930/QD-TTg in 2009).

*On drugs*, drug supply has secured sufficient drugs availability to meet people's needs for health care. The network of retail drug supply covers throughout the country, securing availability of essential drugs. Up to the end of 2010, total retail drug outlets meeting GPP standards was 4278, equivalent to 42.4% of the total. Domestically produced drugs have increased, meeting up 50% of drug needs.. Domestically-produced and imported *vaccines and biologics* have been granted with legal registration by the Ministry of Health and met the demand for vaccines in Vietnam.

*On medical equipment*, in 2007, carried out decentralization of power in selection and purchase of medical equipment. The number of modern medical equipment is getting more and more. As of 31 December 2008, the whole country had 6 MRI machines, 73 computed tomography (CT) scanners. Domestic production of medical equipment toward exportation has been given interest.

*On medical infrastructure,* by end of 2009, 98% of communes had a commune health station. The Prime Minister decided to supplement 25 projects on upgrading district and regional hospitals in 19 provinces/cities using funding source of the government bonds.

*Difficulties, shortcomings*: Domestic pharmaceutical production remains limited. The pharmaceutical market still depends on imports (for both final products and ingredients). Safe and rational use of drug, especially antibiotics remains unchanged, in both community and hospital. The use of antibiotics in agriculture sector is not yet strictly controlled. Such a practice increases degree of antibiotics resistance of bacteria strains. Although drug prices have received attention the problem remains unresolved. Drug cost per capita in 2010 was 22.25 USD increasing by 12.5% over 2009, including causes of irrational use of drugs negatively affecting the users and waste of resources of the society. Domestic production of medical equipment is low, even for essential medical equipment. Effectiveness of investments, management and use of medical equipment remains limited. Unnecessary use of equipment is occurring, especially diagnostic imaging, and equipment installed under social mobilization mechanism. Infrastructure and medical equipment at all levels remains weak (especially at the grassroots level), and does not yet meet requirements for health care of the people.

#### 6. Health information systems

Policy orientation for health information system development over the past 2 years stays unchanged except for the orientation for application of health information technology.

Recently, health information system has achieved considerable improvements. The Ministry of Health has approved the project on strengthening information technology organization system in all health units from 2010 to 2015 with a view to enhancing efficacy, efficiency of information technology system in health. The master plan for health information system development to the year 2015 and 2020 is under development. The steering committee and working group on strengthening health information has been established and started preparing a proposal on comprehensive reform of health statistical indicator system. Currently, the project on Information on Health through mobile phone network (m-Health) is undergoing to reach the population segments having difficulties to access information; The project on support transforming the Vietnamese health system funded by Rockefeller Foundation also assessed the potentials and needs for electronic health development (eHealth).

Capacities in data collection, process and reporting compiling have been improved: registers and data collection tools were issued in September, 2009; training courses were held in localities. Application of informatics technology in the process, management and transmission of health information has been promoted by improving and upgrading the current software.

Regulation for health information dissemination is under development. The health statistical yearbook, 2010 will be improved and soon issued.

*Difficulties, limitations*: The plan for health information system development is not yet issued. Regulations for strengthening coordination, information sharing within and with other sectors are not yet prepared. Lack of document that regulates obligations and responsibility for updating and reporting on health care activities of the private sector. Statistical indicator system, records and statistical report, guidelines for health management information, hospital information, information on preventive work and epidemic control, information on teaching and research is not yet completed.

The quality of information is not yet assessed by 6 criteria for quality (appropriateness, accuracy, timeliness, accessibility, interpretability, completeness). Some areas lack information, e.g., private health sector, causes of death, risk factors of non-communicable diseases, "social mobilization" activities of public health facilities, detailed information on health human resource... There is no activity strengthening record system for non-communicable diseases, death declaration in community. The proposal request for funding to conduct the second National Health Survey is not yet prepared.

Policy for health information dissemination and sharing is not prepared specifically and clearly as still remains statistical data is late to be disseminated thus hindering its primary purpose. The health statistical yearbook is not yet posted on internet and slow to be published than expected. No strengthening capacity in data analysis and utilization at large scale. Many sources of information do not have a mechanism for dissemination/publication, making it difficult to access; knowledge on use of data for analysis, evaluation, forecasting by managers, planners and statisticians at all levels remains inadequate; database archives at all levels are poor, and do not include data from the different sources; and they are not managed in a scientific manner and are not updated, archived or transmitted through modern means.

#### 7. Primary health care, preventive medicine and national target programs

The 11th Party Congress highlighted preventive work and improvement of people's health. The National Assembly passed the Law on Food Safety on 17 June 2010. In 2011, the draft Law on Tobacco Control was completed. The Government issued Decision No. 2331/QD-TTg "Issuing list of national target programs in 2011", including 4 national target

programs for health led by the Ministry of Health, 3 national target programs with 17 specific projects under preventive medicine. In 2011, the "National benchmark for preventive medicine" was implemented throughout the country.

The Government approved the National Strategy on Malaria control in Vietnam for the period 2011–2020 with an orientation to 2030 (Decision No. 1920/QD-TTg dated 27/10/2011) and the National program on labor safety and hygiene for the period 2011–2015 (Decision No. 2281/2010/QD-TTg). The Ministry of Health has approved national standards on clean drinking water, household water quality and hygienic toilets; Joint Circular guiding organization and implementation of labor safety and hygiene in the workplace (01/2011/TTLT-BLDTBXH-BYT); is currently drafting for submission to the Government detailed regulations and instructions for deploying the Law on Food Safety; Develop a master plan for medical waste management in the period 2011–2015; draft strategy for food safety and hygiene for 2011–2020.

Health education and communications has been strengthened. Village health care network has been consolidated in the GAVI-funded project, including considerable improvements in community health education and communication skills. No major epidemic outbreak occurred. The Ministry of Health actively directed the supervision, detection and quarantine infection cases of influenza A(H1N1), influenza A(H5N1); epidemiologic survey of influenza A(H1N1) prevalence in Ha Noi and Ho Chi Minh City; strengthening supervision of immigrants from epidemic regions to early detect infection. On improving quality and food safety and hygiene, the Ministry of Health issued 11 Vietnamese standards (QCVN) for food, 23 standards for micronutrients supplemented to food, milk and mild products, drinks, addictive substances, developing the project on strengthening capacity in quality management, food hygiene and safety for the period 2011–2015. Guidance for decentralizing tasks, targets for auditing and verification procedures to serve the state management in food quality and safety. Strengthening inter-sectoral steering committee for food hygiene and safety. Issuing plan for month of action for food hygiene and safety.

Collaborating with other ministries, sectors to direct and supervise environment sanitation, safe water supply, medical waste management has witnessed improvements. The school health project in the National Health Target Program for 2011 was approved by the Government. The national target program for HIV/AIDS prevention and control is ongoing; the project on "Strengthen capacity of the national committee for AIDS control, drug abuse, prostitution on coordination and policy advocacy" funded by UNAIDS. Preventive medicine system is promoted at the central level, and upgraded at the local level (province, district, commune). In 2011, this was the year implementing the National benchmarks for preventive medicine.

*Difficulties, shortcomings*: Organization of preventive medicine units is fragmented and ineffective due to lack of a comprehensive approach and inter-sectoral collaboration in some sphere such as primary health care, preventive medicine/public health, education and communications causing difficulties in securing consistency of the policy and effective financial and resource allocation, human resources. Data for monitoring and surveillance is inadequate and seldom verified. Reports on performance lacks objective and independent verification. Supportive supervision for the commune level remains weak in many localities. The role of the health sector in intersectoral issues (such as traffic safety, environmental pollution,...) remains limited, primarily focused on providing evidence of harm to the people's health and advocating other sectors to implement appropriate interventions. But it needs to provide more complete evidence to advocate implementation more effective interventions in order to reduce risks, prevent illness and injuries. Awareness of the people and of policymakers about protection, care and promotion of people's health remains limited, especially knowledge of risk factors for non-communicable diseases and how to change behavior to reduce the risks. Socio-economic determinant of health approaches have not yet been emphasized, for example incomes, living conditions, working conditions, educational level and accessibility to information, access to safe food, opportunities for physical activity, etc.

#### 8. Medical examination and treatment

In recent years, policy orientation in health examination and treatment seems unchanged. The 11th Party Congress documents and directing guidelines of the Government keeps demanding developing a health care network toward equity, efficiency, development and quality. The fiver-year health sector plan (2011–2015) has set forth tasks: Complete the normative legal system, implement the Law on Examination and Treatment, Law on Health Insurance and other statutory documents for health care; create favorable conditions for the people to access quality health care services; Implement measures to prevent hospital overcrowding; strengthen capacity in hospital management, financial management, reforming operation and financing mechanism.

Over the past 2 years, the health care network has been strengthened by investments through projects approved in Prime Ministerial Decision 47 (2008) and 930 (2009); many solutions to strengthen access to and equity in health have been deployed. Service provision ability has been improved: the number of treatment beds is 20.5 per 10 000 population (excluding beds at commune health stations); 80% of commune health stations reach the national benchmark in 2010, 95% of commune health stations have an assistant doctor in pediatric-obstetric care, 70% of commune health stations have a doctor and 85% of villages have health workers. Continue to study expansion of health insurance coverage at district and communal level.

Specialized techniques such as organ transplant, cardiovascular interventions, blood vein, surgery and intervention endoscopes, early diagnosis of cancers, application of robot in surgery demonstrating technical capacity of terminal hospital have been substantially improved. Project 1816 on secondment of professional staff at high level to support lower level is maintained and usually about 450 professional staff taking rotations to do the job [37].

Quality of health care is of interest with initial establishment of hospital quality system, metrology and standards for laboratories. At the end of 2011 the Government had issued Decree 87/2011/ND-CP, providing detailed guidance on implementing the Law on Examination and Treatment, Decree 96/2011/ND-CP regulating penalties for administrative violations in medical examination and treatment. Quality standards and calibration is under development to lay a groundwork for issuing practice license and improvement of service quality. The Ministry of Health is also promoting development of treatment guidelines, technical treatment protocols, procedures [82]. Some legal documents are being developed and should soon be issued including: Circular guiding conditions, procedures for granting licenses and practice certificates, Circular guiding implementation of hospital service quality management, management of lab test quality, a National plan for improvement of health care services, National benchmark standards for health care facilities, new medical service price schedule based on full and correct costing, and a Master plan for specialized hospital development.

*Difficulties, shortcomings*: There exists barriers that hinder access to and equity in health care. The organizational structure of local health system, including district and

provincial level is not yet consistent, and no classification of private hospitals. Regulation for division of clinical care by level is relative and flexible, and without a mandate for implementing techniques at various levels. Effectiveness in health service delivery should be paid more attention. No adjustment of fee schedule is made, the other side of financial autonomy mechanism, joint venture and business partnership in medical equipment, unable to assess medical technology leading to risk of drug, technique abuse and lab tests are causing resource waste. There are difficulties in developing quality system and implementing quality methods in medical service management. Although hospital crowding is declined in some hospitals, it still quite prevalent. Technical capacity of lower level remains limited, technology transfer from provincial, district to communal level is not yet done well.

#### 9. Population-Family planning and reproductive health care

The 11th Party Congress documents set forth a target at "maintaining the replacement fertility rate, assuring rational sex ratio at birth, improving quality of the population"; "population growth rate is table at 1%" and "do well reproductive health care work, maternal and child health care, and drop child malnutrition rate, making contributions to improved quality of the population"; The Prime Minister issued Decision taking December as "*National action month for population*"; The Ministry of Health also issued many technical documents on maternal and child health care. It is expected in the coming year, the Government will approve strategies for population-family planning and nutrition for the period 2011–2020.

On population and family planning, in 2010 crude birth rate (CBR) was about 17.1‰, attaining the target; Total fertility rate (TFR) stayed steady at below 2.1; the population size of Vietnam in 2010 was 86.92 million people which is beyond the projection of 89 million; sex ratio at birth was 110.5 boys for every 100 girls in 2009 and 111.2 in 2010; Contraceptive prevalence rate (CPR) was 78%, in which 67.5% of married couples used modern contraception methods. In addition, the General Office of Population and Family Planning has directed implementation of pilot models improving population quality has initially obtained encouraging results. The state budget for population and family planning program during the period 2006–2010 was 599 billion VND per year, per capita was 7050 VND (0.42 USD per year).

On maternal health care: Rate of pregnancy management was 95%; antenatal visit 3 times per pregnancy was 82%; the proportion of women injected with tetanus immunization was 94.2%; birth assisted by skilled birth attendant was 95.7%, however home delivery in some mountainous areas remained high at 12–35%; post-partum visit was 92.5%; rate of obstetric complications was low but increased by 0.6‰ over the previous year.

Child health care: infant mortality rate dropped to 16‰, all targets of reducing infant mortality and under-five mortality were reached; child malnutrition prevention activities were maintained well with under-five child malnutrition (underweight) dropped to 18%, however stunting rate was till high at 29.3%.

Other reproductive health care services like safe abortion, reproductive tract infection prevention, reproductive health care for adolescents, the elderly, males were delivered and obtained better results the previous year.

*Difficulties, shortcomings*: Many localities are unable to achieve the replacement fertility rate even the rate increased again. Sex ratio at birth tend to increase rapidly. Quality of population is slow to be improved. Disparities in maternal and child health indicators between mountainous, disadvantaged and flatland areas remain large. Risk of double burden in nutrition: both malnutrition in stunting and obesity. The public investment in reproductive

health care fails to meet the need. The reproductive health and family planning clinic network lacks human and financial resources and capacity to provide better quality services.

#### 10. Health system governance

The 11th Party Congress Documents laid out the tasks: Complete the government apparatus, speed up transformation in administrative reform. Enhance capacity in state management and governance by rule of law, strengthen socialist-oriented laws with discipline and rules. The Government has issued: Decree No.22/2010/ND-CP amending, supplementing Article 3 of the Decree No. 188/2007/ND-CP dated 27 December 2007 regulating functions, tasks, power and organizational structure of the Ministry of Health.

Over the past year, the health sector has made some improvements in policy-making: Development and implementation of the five-year plan, draft the strategy for the protection, care and improvement of people's health care and a comprehensive master plan for the health care system during 2011–2020 vision to 2030, other specific strategies and policies. Many laws have been issued covering almost all spheres of the health sector including important laws such as the Law on Examination and Treatment (No. 40/2009/QH12); Food safety (No. 55/2010/QH12), etc.. The Ministry of Health and relevant ministries issued Circular guiding implementation of the Law on Health Insurance; developing Decree, Circular guiding implementation of the Law on Examination and Treatment and the Law on Food Safety.

Quality of health planning work is improved through the preparation of annual health joint review (JAHR) with extensive consultations with experts and stakeholders and getting better. In 2010, the Ministry of Health conducted a Joint Assessment of National Strategy (JANS) using assessment tools of IHP+ (International Health Partnership and related initiatives). There is considerable improvement in strengthened dialogues, policy advocacy and influence (success in resource mobilization of financing to upgrade the grassroots health care network).

Conducting streamlining administrative procedures within the management scope of the Ministry of Health. Undertaking surveys, assessment and drafting Circular revising Circular No. 03, establishing health insurance division at provincial health department. The Ministry of Health issued Circular No. 17/2009 guiding the check, inspection, resolve of complaint and denouncement of head of health units.

*Difficulties, shortcomings*: The extent of direct involvement of the Ministry of Health in management of service provision has not yet declined. Resources for strengthening capacity in policy-making, stewardship are not prioritized for use. Lack of comprehensive research and analysis, impact assessment of new factors such as epidemiological shifting, grassroots health network in the current socio-economic conditions, development of the private health sector, policy making. The role of research institutes and consultancy in research, surveys and providing evidence for policy making and adjustment of strategic policies remains limited. The degree of involvement of civil society organizations, professional association the monitoring, supervision remains unchanged.

The report reserved 5 chapters for in-depth analysis of the mechanism for state budget allocation and use of financial resources in health; payment mechanisms for medical examination and treatment services; implementing the roadmap towards universal health insurance coverage; development of health policy and strengthening capacity for developing health policy. Some of the main findings are presented below.

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#### 11. Health care financing reform

Analyses of mechanism for health financing distribution and use show that: although investment in health has increased, the public spending on health is on the increase toward equity, major difficulties and challenges to health financing of Vietnam are resource constraint, irrational distribution, and ineffective transformation of the state budget financing. The health care financing of Vietnam is not appreciated for many reasons, high household out-of-pocket payment, fee-for-service payment is prevalent, transparency is low, etc. leading to negative impacts and consequences on the people and society.

Financing for preventive medicine contains lots of irrationalities, giving autonomy by Decree No. 43/2006/ND-CP to preventive medicine units has posed many problems as it does not bring about effectiveness. The state budget allocated to hospitals mainly rely on the class of the hospital and number of treatment beds, which is regarded as level-off and adverse subsidy.

Service price and utilization is difficult to control. The service price is so unreasonable compared with general prices of the society. To run the hospital, hospitals intended to maximize revenue collection, expanding types of health care services including services that should be provided at lower level making overcrowding more serious, reducing quality of care and increasing abuse of drugs, lab tests and high technologies, treatment costs... The state management seems ineffective in a sense of service price control and service utilization, orientation and encourage to provide appropriate health care services.

The current health financing mechanism is posing problems not on for the patients, health facilities but health workers. The health financing system fails to create motivation and effective performance for health workers, to some extent, inducing movement of health workers from rural to urban, lower to higher level and from the public to private sector.

#### 12. Reform provider payment methods

The health sector has strived to reform provider payment method and obtained some *initial results*. A steering committee for provider payment method was established. A roadmap for the development and implementation of DRG-payment method has been drafted with the support from the Rockefeller Foundation. Following the pilot in 4 hospitals of Thanh Nhan and Ba Vi, the DRG payment method will be applied to 20 normal diseases with highest volumes, and start off in early 2013.

The World Bank and other development partners like Delegation of the European Commission are also undertaking pilot projects on alternative methods of capitation (HEMA and KICH) and output-based payment using fee-for-service and capitation method (results-based payment project – World Bank).

Efforts in provider payment reform mentioned above are head for establishing a performance-based payment mechanism quantified through more reasonable product units (e.g., service package or number of treatment cases) instead of single services or input-based financing.

*Difficulties, shortcomings*: There was no synchronous reform plan as well as strong commitment for policy development and issuance at the highest level. Knowledge and experience in provider payment method is lacking. Lack of motivation for reform due to influence of group benefits related to direct payment method. Lack of pertinent investment in studies to apply new payment methods. Health care management information system remains very weak both in integration and quality thus failing to meet the requirements for management of supply and use of health care services which are limited in terms of capacity,

capacity in implementing and applying new and advanced payment methods. Hospital management capacity, especially financial and service management, remains limited, which also directly affects the program for operation and financing reform in general and provider payment method reform, in particular. The professionalism of the service buyer - VSS is limited. The current multi-party payment method cannot be seen as an effective management tool.

#### 13. Roadmap for universal health insurance coverage

The Law on Health Insurance was issued in 2008 laying out the roadmap for expansion of health insurance coverage to different groups aiming to achieve universal health insurance coverage. According to the roadmap, by 2014, the remaining uncovered groups will begin to participate in health insurance according to regulations. The Five-year health sector plan (2011–2015) has set the goal that by 2014, 76% and by 2015, 80% of the population will have health insurance.

Results of implementing the policy and legislation on health insurance indicate that the number of people with health insurance by the end of 2010 was 52 407 090, equivalent to 60% of the population. The group that has the highest coverage is employees of government agencies with 100% coverage, the group covered through social security with 94.3%, and the group benefitting from state budget subsidies of premiums with 84.5% coverage. After many years of health insurance fund spending exceeding revenues (accumulated overspending in 2008 at 655.5 billion VND and in 2009 at 2083 billion VND), the current health insurance fund is able to achieve balanced revenues and expenditures through expansion of the number of people participating in health insurance, especially the groups for which the Government pays the contributions, and through adjusting the contribution amount to 4.5% of basic salary for most insured groups (in the past it was 3%), and applying cost containment measures. In 2010, after covering the deficits in 2009, the health insurance fund had a surplus of 2818 billion VND. The number and of patient examinations and frequency of health care visits among insured patients also increased each year, as healthcare service benefits are made increasingly appropriate with the changes in morbidity patterns and medical technologies and science develop.

*Difficulties, challenges*: Responsibility of local authorities in implementing policy and regulation for health insurance remains unclear, and there is no enforcement mechanism. Implementing the health insurance policy for some groups faces many difficulties: the near poor – one of vulnerable groups in society has very low coverage (13.1%). Compliance with health insurance regulations for employees in non-state enterprises is very low, with only 53.4% coverage. Similarly, the informal sector still has over 30 million people without health insurance coverage. The management model of health insurance is ineffective due to limited capacity in the state management functions, lacking the completeness and fragmentation in directions for rationalizing regulations for health insurance. The procedure of health insurance audit focuses much on cost control, lacking specific and appropriate indicators to assess the quality of care. Benefits and development of health insurance in width remain limited. The health service provision system fails to meet the needs and assure benefits for the insured in terms of technical level, quality of care and administrative procedures. The benefit package on health insurance is not updated on a routine basis. Patients still have to pay for the difference between charges of the hospitals and the fee schedule.

#### 14. Strengthen capacity for the policy-making process

In recent years, health policy making has made great improvements in selection of priority issues, policy analysis, expansion of participation of stakeholders, selection of policy options in order to quickly respond to the changing socio-economic conditions and disease patterns. Many major policies have been developed and issued aiming for an equitable and efficient health care system.

The Joint Annual Health Review (JAHR), and Joint Assessment of National Strategies from IHP+ applied in the five-year health sector plan 2011–2015 with participation of local and international experts and gradually becomes in important tool in health policy making.

The Ministry of Health has directed conducting studies and regulatory impact assessment of some health policy issues such as overcrowding, hospital autonomy and impact of some draft laws. Nation-wide studies on disease burdens, causes of death have provided valid scientific evidence for health policy making.

*Difficulties, limitations*: There is not yet a comprehensive plan for making policies, strategies and operational mechanisms to meet requirements for reforms and strengthening of the health system in the context of a market economy that is subject to many complex influences on health sector activities and increasing disparities between the rich and poor. There are limitation in the consultative process and policy analysis as policy analysis tends to be limited to a narrow scope, lacking widespread and active participation of experts and representatives of stakeholders. Successes and failures of other countries have not been carefully considered when analyzing and developing policies. Functions and tasks of the state management apparatus are not yet updated and adjusted to fit in with major changes in the health system. Officials in the Ministry of Health are overburdened, and there is a shortage of personnel with capacity to meet the high requirements for health policy making. There is no appropriate form or mechanism for mobilizing advisory capabilities of experts within and outside the Ministry of Health. There is not yet a mechanism to ensure accountability mechanism in policy formulation and decision-making.

Policy formulation capacity of health sector managers remains limited. There is a shortage of outstanding leaders and managers, leading specialists, staff with high qualifications who have the ability to predict and deal effectively with complex problems that arise. Knowledge of the policy-making process, use of evidence for policy-making, ability to propose policy options and test policies prior to promulgating them are aspects to which inadequate attention has been paid. Advisory and policy advocacy skills remain limited. Capacity for planning of policy implementation is weak, especially at lower levels. The monitoring and surveillance of medical and pharmaceutical practice is below expectations.

The capacity in providing scientific groundwork and evidence for health policy making remains weak. Researchers in agencies and units of the Ministry of Health charged with policy making have not received adequate training to upgrade their skills on a regular basis. The working conditions and environment are not attractive to motivate and bring in full play and devotion of policy researchers. Besides that, database providing information and evidence for policy-making remain adequate.

Courses to upgrade professional skills and strengthen management capacity face many limitations. Although the Ministry of Health has a Re-training committee and has implemented many activities, the contents of training on health policy-making are not yet included in the program. Departments and administrations of the Ministry do not yet have an orientation for training about health policies for their staff. The number of projects paying attention to health policymaking are too few, and often only focused on narrow scope. The health information system to serve management and policymaking has many limitations.

### **Chapter 12: Recommendations**

On the basis of the update on the health system situation and in-depth analysis on topics in health financing and health system governance, this report makes recommendations on solutions for priority problems in order to improve implementation of tasks assigned in the 5-year plan and to implement the policy orientation that has been decided upon.

#### 1. Health problems and emerging diseases

- Continue to invest in and implement effective methods for control of epidemics and disease including strengthening and ensuring provision of resources (financial and human), to monitor and report outbreaks, IEC to the people on the signs, symptoms, syndromes, diagnosis and control of communicable disease, social diseases, dangerous epidemics, resurgence of diseases such as dengue fever, malaria, tuberculosis, HIV/AIDS, influenza A(H5N1) and A(H1N1), streptococcus suis, rubella and E. coli,... Maintain and increase immunization rates and quality, especially in disadvantaged, isolated, remote regions. Encourage the people to obtain immunizations against diseases with high incidence and fatality that are not yet included in the expanded program on immunizations. Strengthen intersectoral collaboration in surveillance, detection, investigation and control of emerging diseases.
- Speed up the allocation of resources to promote more strongly activities for health promotion, encouraging healthy lifestyles, strengthening environmental health, reducing risk factors for diseases and death from non-communicable diseases through tobacco control, control of harm from alcohol consumption, accident and injury prevention, control of occupational disease, monitoring and treatment of waste that causes environmental pollution and negatively affects human health. Prioritize surveillance and propose methods to treat hospital waste, industrial waste, plant protection chemicals that cause environmental pollution and harm to human health, especially those that cause cancer. Advocate to policy makers, ministries, and other relevant sectoral agencies on issues related to ensuring policies to support reductions in harm from risk factors for non-communicable disease.
- Ensure provision of adequate budget, strengthen technical assistance, training, monitoring, supervision in order to strengthen health activities at the grassroots health system. Adjust policies on government salary and remuneration for preventive medicine workers and for commune and village health workers, increase salary and increase other forms of remuneration in order to attract and retain good quality human resources for preventive medicine to commit to long-term jobs in this subsector.

#### 2. Human resources for health

#### 2.1. Manage human resources development

- Quickly finalize the Master Plan for Health Human Resources Development with strategic solutions that are feasible, long-term and sustainable.
- Improve capacity and skills for forecasting need for human resources and develop a master plan, strategy for health human resources development.

Continue to consolidate the health human resources information reporting system from the central to the local levels and integrate this into the system for monitoring and evaluation of health human resources. Add into the existing reporting system the task of regular monitoring of data about health human resources in the private sector. Integrating information on training and use of human resources in order to respond in a more timely manner to training needs.

#### 2.2. Improve quality of medical training and education

- Develop a long-term master plan on comprehensive reforms of medical education for the entire health worker training system, relying on lessons learned from within Vietnam and from other countries.
- Develop training accreditation criteria specific to health sciences fields and use them in general education accreditation system. Organize training of officials specializing in education quality accreditation.

#### 2.3. Deployment and remuneration of health workers in remote areas

- Undertake research on models for effective deployment of health human resources in disadvantaged areas to serve as the basis for developing appropriate policies.
- Evaluate effectiveness of special training modalities used in recent years aimed at supplying health manpower to mountainous, remote, isolated areas and to lower levels of the system. Rely on results of the evaluation to make appropriate adjustments to policies.
- Regularly monitor implementation and assess effectiveness of remuneration policies on recruitment, deployment of health manpower in order to make appropriate adjustments, in particular for disadvantaged areas.
- Develop a long-term master plan as well as regulations on retraining, continuing medical education, satisfying the requirements in the Law on Examination and Treatment related to updating knowledge of health workers.
- Diversify forms of improving capacities of health workers, paying attention to applications of distance learning, e-learning and appropriate training modalities for health workers in disadvantaged regions.

#### 3. Health financing

#### 3.1. Mobilize adequate funds to meet need

- Study and adjust norms and mechanisms to allocate recurrent budget appropriate for commune health stations and village health workers.
- Implement internally consistent and intersectoral measures to implement the goal of universal health insurance coverage.

#### 3.2. Use financial resources effectively

- Ministry of Health develop and implement a Medium Term Expenditure Framework for 2012–2014 as stipulated in the Ministry of Finance plan.
- Ministry of Health collaborate with the Ministry of Finance to integrate monitoring indicators on allocation of state budget resources by sector into the regular reporting system on provincial health spending.

• Ministry of Health issue guidelines for allocating state budget based on performance and output indicators.

#### 3.3. Regulate social mobilization more stringently

- Strengthen capacity for state management in implementing autonomy in health service units.
- At the same time, review and systematically analyze the system of legal documents to develop a consistent policy and harmonize between external factors and the process of increasing autonomy of government health service providers.
- Implement a true assessment of corruption in the health sector and propose appropriate solutions for its control.

#### 4. Pharmaceuticals, medical equipment and infrastructure

#### 4.1. Pharmaceuticals

#### Improve quality of pharmaceuticals and vaccines

- Study the establishment of an intersectoral committee to prevent fake and substandard drugs.
- Develop and organize implementation of pre- and post-verification and inspections in each area of pharmaceuticals management.
- Develop a project to strengthen capacity of the pharmaceutical quality control system.
- Strengthen capacity and role of the system of pharmaceutical quality control.
- Assess and adjust policies on clinical testing of pharmaceuticals.
- Ensure sufficient inspectors to implement inspections.
- Develop an information reporting and archiving system at the Drug Administration of Vietnam on quality for every batch of vaccines produced and share information on quality in the process of competitive bidding to procure vaccines.
- Increase tightness of supervision in all stages from distribution, storage and injections to prevent adverse events related to vaccination.
- Develop a system for certifying units that provide vaccination services, require that health workers implementing vaccines have better training.
- Require procurement through competitive bidding, and vaccines sold must meet GMP standards.

#### Strengthen appropriate use of antibiotics

- Review and revise the policy on essential drugs based on standard treatment guidelines and cost-effectiveness criteria;
- Establish high quality microbiology departments in hospitals;
- Assess, adjust and strengthen effectiveness of IEC programs on rational use of drugs.
- Implement strictly the pharmaceutical prescription regulations for retail pharmacies (drawing from experiences in Ho Chi Minh City);
- Develop a consumer protection association in the area of pharmaceuticals.

- Establish a network for surveillance of antibiotic use, antibiotic resistance in hospitals and the community;
- Collaborate with the Ministry of Agriculture and Rural Development in monitoring use of antibiotics in livestock, poultry, aquaculture.
- Strengthen the mechanism for controlling use of drugs for patients with health insurance.

#### **Tightly control drug prices**

- Decide which agency has responsibility for pharmaceutical prices. Develop ceilings on markups for each stage of pharmaceutical distribution.
- Set up a mechanism for controlling pharmaceutical pr9ices with the participation of agencies outside the health sector
- Develop policies to foster use of generic drugs.
- Apply international and domestic drug reference pricing methods
- Monitor and make transparent the retail and purchase prices of drugs
- Control conflicts of interest, increase transparency of the process of setting retail pharmaceutical prices.
- Revise Decree 45/2005/ND-CP on penalties for administrative violations in pharmaceuticals. Implement a pilot of strict penalties for non-compliance with existing regulations, including the regulations on prescription sales of pharmaceuticals.
- Computerize health insurance auditing of patient records in order to better control hospital pharmaceutical prescribing practices.

#### 4.2. Medical equipment

- Assess the situation of medical equipment and medical consumables; Invest in appropriate medical equipment for each level; Update the standard medical equipment list for health facilities at different levels, especially at the grassroots level.
- Develop a mechanism and solutions to regulate social mobilization in medical equipment
- Issue regulations related to ensuring an appropriate infrastructure and environment to operate medical equipment effectively, safely, economically and to prolong equipment life.
- Develop a database on medical equipment for curative care and preventive medicine facilities at all levels.
- Issue a decision and implement activities in health technology assessment (HTA).
- Develop and supplement mechanisms and solutions to update and improve qualifications of employees operating and prescribing use of medical equipment.
- Strengthen domestic manufacturing of medical equipment.

#### 4.3. Medical infrastructure

• Promote basic investments in medical facilities through increasing social resources invested in medical infrastructure.

- Prioritize investments in infrastructure at commune health stations in poor areas as they are facing difficulties from inadequate space and buildings falling into disrepair.
- Design commune health stations and district hospitals that are appropriate with different regions, and satisfy the needs of local people.

#### 5. Health management information system

#### 5.1. Refine health information system development policies and plans

- Develop and complete policies on health management information systems to create conditions for effective implementation and to satisfy the legal framework of the government in both public and private health sectors in provision of health information and databases.
- Develop and implement legal regulations on the organization of manpower, budgets for statistical activities at all levels; regulate clearly the functions and tasks of the leadership, statistical workers to synthesize information from the central to provincial, district and commune levels in order to satisfy health information needs and avoid duplication and overburden of registers, forms for each health facility, especially at the grassroots levels.
- Organize in-depth and comprehensive systems assessments on a periodic basis in order to identify achievements and detect difficulties that need to be resolved, and at the same time to have methods to penalize any administrative violations in statistical work and the forms of penalties that can be imposed for non-compliance.
- The Ministry of Health should sign a memorandum of understanding to create a mechanism for updating data on vital records, birth and death registration in collaboration with the health sector's mortality reporting system.

#### 5.2. Strengthen ability to meet needs of information and data users

- Cooperate closely, provide and exchange information between different departments, administrations, national health target programs and relevant ministries and sectoral agencies related to gathering, processing, providing, sharing information between information systems of the health sector and information systems of related sectoral agencies such as the General Statistics Office, Ministry of Finance, Ministry of Justice, General Administration of Population and Family Planning, VSS and other sectors. Strengthen the dissemination of information in many diverse forms appropriate with users.
- Develop a center to integrate health information databases to ensure unified management through one focal point, assign responsibility for data gathering and sharing.
- Develop a proposal to mobilize funds to implement the Second National Health Survey.
- Step by step modernize the health information system in line with financial conditions, technology and needs of users at all levels. Modernization will include upgrading developing and applying software for management, data processing, transmitting and archiving information, ensure all levels can process relevant reports.

#### **5.3. Strengthen information dissemination and analysis of statistical data**

- Review, develop, a system of indicators, registers for statistical reporting in the health sector, guiding documents on health management information, hospital information, information on preventive medicine and control of epidemics, information related to teaching and research.
- Decentralize the indicator system to each level. Develop indicator dictionaries.
- Strengthen capacity to undertake analysis and use data on a large scale, analyze indepth to assess trends, to serve forecasting to make regular plans.

#### 6. Preventive medicine, public health and primary health care

- Continue to invest in infrastructure and human resources for preventive medicine and primary health care, implement effective interventions such as the expanded program on immunizations, epidemiological investigations during outbreaks, vector control, food safety inspections, etc.
- Continue to develop and implement comprehensive strategies and integrate current activities and interventions, especially the National Health Target Programs.
- Improve supportive supervision and create effective mechanisms to ensure accountability.
- Apply the socio-economic determinants of health approach when assessing the situation and develop interventions that control non-communicable diseases, with emphasis on active prevention and early detection.
- Strengthen research capacity, collaborate with multiple partners, advocate for policies to garner support for interventions outside the health sector that can reduce risks to health and promote health. Pay greater attention to changing risk factors related to climate change, industrializations and urbanization.

#### 7. Medical examination and treatment services

# 7.1. Ensure equity, efficiency, increase the ability of people to access health care services

- Continue to assess implementation of Circular 03/2008/TT-BYT-BNV on the health sector organizational system at the subnational level, submit a draft decree on local health system organization to the Government for approval in order to create a uniform local health system. Submit proposals to the Prime Minister to continue to provide capital to implement Project 47/2008/QD-TTg, Project 930/2009/QD-TTg in order to complete the work of upgrading district, inter-district, and provincial hospitals. Promote development and issuing of regulations on the social responsibility and duty of health workers towards socio-economically disadvantaged regions of the country.
- Ministry of Health should develop guiding documents on health insurance reimbursement of costs of screening for early detection of some diseases, the list of drugs and medical consumables that will be covered by health insurance, the list of high cost, high tech services, and resolve difficulties in payments of traffic accident cases.
- Implement Decree No. 96/2011/ND-CP on penalties for administrative violations in medical examination and treatment. Implement Prime Ministerial Decision No.

2166/QD-TTg dated 30 November 2010 on the action plan of the Government to develop traditional medicine in Vietnam to the year 2020. Develop and implement projects that have been approved in the plan in order to continue to complete the management organization and network of traditional medicine providers from the central to local levels.

#### 7.2. Strengthen quality of examination and treatment services

- Establish a system for managing quality in examination and treatment, with special attention to forming quality management units in curative care facilities.
- The Ministry of Health should become the focal point for developing national standards on quality of medical examination and treatment services. Starting in 2012, the focus should be on developing hospital quality standards, and promote the setting up of organizations to accredit quality of medical facilities, and complete the evaluation methods and implement a pilot to assess and accredit quality after the Decree stipulating details of the articles in the Law on Examination and Treatment comes into effect. Complete the development of guiding documents to certify that medical examination and treatment facilities have met the standards.
- Strengthen advocacy to improve awareness of the leaders and managers in the health sector on quality, strengthen training on quality management and apply quality assurance methods in all medical facilities.
- In 2012, focus on completing the development of treatment guidelines, medical procedure guidelines, care pathways for common diseases, diseases that are costly to treat and develop a mechanism to update and evaluate implementation of professional guidelines.
- Promote the issuing and implementation of circulars guiding implementation of hospital quality management, national plan for quality improvement for medical services. Develop quality indicators and assess quality based on this set of examination and treatment quality indicators.
- Overcome the situation of hospital overcrowding through short-term and long-term solutions. Set up an effective referral system, implement medical services appropriate with the professional level of the facility, starting with the insurance system. Strengthen and improve quality of curative care services at the grassroots level, strengthen preventive medicine activities and primary health care. Continue to implement professional mentoring and seconding of experienced staff at higher levels to assist in technology transfer at lower level facilities, research and improve the methods for effective technology transfer.
- In 2012, complete the setting up of the system for registering and issuing licenses and permits for examination and treatment professionals and facilities, continuing medical education, continuing professional development with the orientation to reach world standards.

## 7.3. Strengthen management, reform hospital financing mechanism towards greater autonomy, openness and transparency

• Implement revisions in the user fee schedule to replace Decree 95 and Joint Circular No. 14 on the basis of correct and comprehensive cost estimates.

- Implement feasible methods to control costs of medical services. In 2012, develop a
  project to pilot health technology assessment, starting with a focus on high technology
  with a high cost and commonly used technologies used by a large number of patients,
  and methods to control implementation of clinical guidelines in order to limit
  unnecessary use of drugs, technologies and lab testing.
- Continue to implement Government Decree No. 69/2008/ND-CP on strengthening social mobilization in the health sector. Research to make early adjustments to overcome limitations of Decree 43 on hospital autonomy. Create conditions for development of the private health sector on the basis of strengthening control over compliance with technical standards and patient safety, control prices of health services. In 2012, continue to assess and implement joint ventures, business partnerships and participation of private investors in investments in curative care facilities (contribute capital for construction of infrastructure), participation in management, contracts to provide specific services (nutrition, laundry services, hospital cleaning, waste treatment, security services or maintenance and servicing of medical equipment, etc.). Develop a clear orientation and appropriate management mechanism for each type of public private partnership.
- Strengthen checking, supervision of compliance with the Law on Examination and Treatment and professional guidelines.

#### 8. Population, family planning and reproductive health

- The Government should quickly approve and issue the National Nutrition Strategy for the period 2011–2020.
- Develop and implement projects aimed at implementing the National Strategy for Population and Reproductive Health 2011–2020.
- Strengthen leadership and direction for implementation of Politburo Resolution No. 47-NQ/TW and Conclusion 44-KL/TW, Government Resolution No. 31/NQ-CP; organize heighten awareness among government officials and staff, and the armed forces from the central to grassroots levels.
- Develop an action plan for the period 2011–2015 and related projects in the area of
  population and reproductive health belonging to the National Target Programs in
  order to implement the initial period of the above strategies at both the central and
  provincial levels.
- Issue policies giving priority to resolving problems of population and reproductive health in the next few years.
- Develop and implement the master plan for the reproductive health network, including a system of obstetrics and pediatrics hospitals, with particular attention paid to developing obstetrics-pediatrics hospitals at the provincial level and combining obstetrics and pediatrics departments in provincial and district general hospitals.
- Strengthen methods to improve quality of population and family planning services and reproductive health care.

#### 9. Health system governance

 Continue to refine the legal system on health, develop and issue the Law on Tobacco Control. Develop and complete legal documents guiding implementation of the Law on Infectious Disease Control, Law on Health Insurance, Law on Examination and Treatment, Law on the Elderly, Law on the Disabled, Domestic Violence Law, and the Law on Food Safety.

- Strengthen capacity for policy-making, planning, master planning; review the process of policy development, overcome weaknesses. Develop a plan for further training to strengthen capacity for evidence-based policy-making. Set up a plan for further training on research skills and how to undertake regulatory impact assessment reports for draft laws; Strengthen capacity for developing policy briefs. Prioritize resources of the Ministry of Health on strengthening policy-making capacity; issue professional regulations and standards, develop plans, direct implementation of health sector plans. Bring into play the role of research and advising institutes/centers in the work of researching, surveying, providing evidence for policy-making process and adjust policies and strategies.
- Strengthen participation of stakeholders in the process of policy-making, develop and implement health plans. Strengthen dialogue, advocate and deliberate about policy issues. Strengthen decentralization and intersectoral/interlevel collaboration.
- Develop concrete mechanisms and instruments to implement policies. Complete and stabilize models of organization for the health network at each level. Consolidate, develop and strengthen capacity of the grassroots healthcare network, especially the commune health stations, district hospitals, district preventive medicine centers; Consolidate and further refine the preventive medicine network at all levels; especially at the district level; refine the networks on food safety, population and family planning, and HIV/AIDS control. Continue to refine the curative care network at all levels.
- Strengthen capacity and effectiveness of monitoring, supervision to implement health policies. Strengthen inspections, verification, supervision. Gradually reduce the involvement of the Ministry of Health in direct management of health service providing facilities through decentralization to localities. Refine the system of monitoring and evaluation indicators and regularly monitor, evaluate results of implementing policies and plans in the health sector. Strengthen participation of social organizations, professional associations in monitoring and evaluation activities.

#### **10.** Reform the health sector financing mechanism

## 10.1. Increase public spending through increase state budget allocated for health and increasing health insurance coverage

By the year 2015, strive to achieve and maintain public spending at over 50% of total health spending. In order to achieve this goal major efforts are needed, especially strong measures of the entire political system to increase health insurance coverage.

## **10.2.** Reform state budget allocation mechanism and increase state budget spending in order to provide more resources for preventive medicine

- Implement measures to increase spending on preventive medicine according to National Assembly Resolution Number 18.
- Draft budgets for preventive medicine units must be based on their assigned tasks and professional activities, i.e. on one hand they must ensure funding for human resources and general running of the facility, and at the same time they must meet the funding needs for implementing professional activities in preventive medicine.

• Gradually transform from the allocation of a fixed amount of funds according to Decree 43, to allocation of a set amount of work, in other words allocate state budget based on outputs.

# 10.3. Implement effectively the shift from funding health service providers to funding beneficiaries of health services, and calculate the full cost of medical services

- Increase effectiveness of support to the poor, the near poor and other policy beneficiaries through support to buy health insurance coverage, overcome the situation of state budget subsidies going to the better off; at the same time, ensure improvements in quality of health services at the grassroots level. As soon as possible revise and amend the regulations on support from the Health Care Fund for the Poor, including: support for food, transportation of the poor, ethnic minority people living in disadvantaged regions when they require inpatient care at a health facility; support part of the high costs of medical care that exceed the amounts health insurance will pay for.
- For facilities providing medical services, full costs of services should be estimated and charged to ensure full cost recovery, while improving quality of medical services. Patients will have their medical charges paid by health insurance or will pay out of pocket, or will receive support from the government for part of the costs through the Health care fund for the poor.
- In order to ensure that all hospitals operate normally and to encourage patients to use medical services at the lower levels, the state budget should continue to subsidize district hospitals, hospitals in mountainous areas, or specializing in lung disease, mental illness, leprosy, etc. The level of support will be calculated in line with the ability of the people to contribute and the implementation of social protection policies, and equity in health care.

## **10.4.** Reform the health financing mechanism to create incentives for health workers to improve performance

- Implement effectively investment projects according to Decision No. 47/2008/QD-TTg, Decision No. 930/2009/QD-TTg and Decision No. 950/2007/TTg to invest in provincial, district hospitals and commune health stations, to create an environment and conditions in terms of medical equipment to bring into play to the greatest extent possible the existing professional capacity and increase incomes of health workers.
- Besides effective implementation of Government Decisions on increasing the level of salary supplements for health workers in disadvantaged areas or working directly with patients, etc. there is a need to put in place additional measures to increase incomes of health workers. One of the feasible measures is to estimate the true and complete medical service cost, apply a case mix payment system or capitation, and in this way encourage health workers to provide more health services more efficiently, reducing waste and in line with care pathways, to serve as a basis for implementing performance-related remuneration of health workers.

#### 10.5. Strengthen state management of health financing

 Reforms of the health financing mechanism are taking place in the health sector, a sector that provides services to society that are considered a special kind of good, requiring a stronger role for state management from the Government, the Ministries and local officials. At the macro level, there is a need to issue policy mechanisms with internally consistent solutions, create clear mechanisms so hospitals can be run and quality improved, while the Government must use the state budget to support the people to access health care services through the health insurance fund and the health care fund for the poor, to ensure that all who need care can access it, and when health care services are used, nobody falls into the poverty trap because of their payments for medical care services.

Strengthen verification and supervision of implementation in localities to ensure that policy mechanisms that have been issued are implemented fully in the localities, especially policies supporting the poor who meet difficulties when they have serious illness and high medical care costs; in addition medical facilities and localities also need to increase further their role and responsibility in procurement of pharmaceuticals, medical equipment, in order to ensure the most effective use of the limited resources allocated to the health sector.

#### 11. Reform of curative care provider payment mechanism

# 11.1. Strengthen policy discussion, exchange information, evidence and develop a consensus for reforming health financing, including provider payments

- Leadership and guidance for reforming provider payments need to be further strengthened. The Steering committee for provider payment reforms needs to operate on a regular basis (monthly, quarterly), with clear division of responsibilities between the various departments/administrations of the Ministry of Health (Medical Services Administration, Planning and Finance Department, Health Insurance Department) and supervision, fostering of the process of implementing the master plan for reforms. Periodic meetings of the Steering Committee need adequate preparation of the agenda, technical and policy contents, and this needs to become the forum for discussion with active participation of development partners interested in health financing reforms.
- Develop a plan for implementing comprehensive reforms in the provider payment mechanism for curative care with contents for activities following a clear roadmap from piloting to evaluation to scaling up. The general plan also needs to include contents of activities to strengthen advocacy for the policy orientation to create a consensus for reforming provider payments. This plan also needs to ensure a mechanism to obtain a recurrent spending budget, along with donor funds and loans, for a continuous process of adjustments and updating of methodology and contents of the new provider payment mechanisms (database and evidence for policydevelopment and related regulations)

## 11.2. Refine technical contents for development and application of more advanced provider payment mechanisms.

Professional capacity for research and application of new provider payment mechanisms is of great importance, and requires the establishment of a technical unit, operating according to the orientation of the Steering Committee (inter-ministerial involving Ministry of Health, Ministry of Finance and VSS) to effectively play the role of the focal point for developing the plan or comprehensive reforms with tight collaboration with relevant departments of the Ministry of Health. This plan should be approved by the first quarter of 2012. A pilot model of results based financing (based on harmonious integration of various provider payment mechanisms including capitation, DRG and fee-for-service) is being studied and developed with financial and technical support of the World Bank (NERRD project). The model design phase is underway and according to plan will be completed in 2011.

- Priority development of the components on information and service classification according to international systems (ICD-10 and ICD-9-CM) to support and promote utilization of information technology in development, processing and applying evidence on the basis of information/data.
- The reform plan needs to appropriately prioritize contents on training and capacity building for development and application of new provider payment mechanisms, including DRG and capitation, which have been determined as the priority options. Contents for building capacity pays special attention to developing methods and implementing costing for capitation, and payment amounts under DRG for hospital services.
- Study the possibility of pooling all sources of payments into a single payer (including State budget and the health insurance fund) to the greatest extent possible. Adjust and reform policies and management regulations for administration of hospitals and other medical care providers to reduce inconsistencies and overlaps in policies related to financing reforms and provider payment reforms.
- Strengthen training in hospital management including priority on modules explaining methodology and skills in hospital costing; methods and skills in applying international classification codes (ICD-10 and ICD-9-CM); methods and skills in management to be applied in the environment in which new financing and provider payment mechanisms are in place, and capacity for implementing the pilot of diverse provider payment mechanisms: capitation and case mix systems.

# 11.3. Strengthen the role of the VSS in developing policies and implementing provider payment reforms

- Besides its role in exchanges and dialogues on policy and implementation of health financing and provider payment reforms, the role and capacity of the VSS needs to be strengthened further so this agency can take on its role as a representative of the people using health care services. Studies assessing the situation and proposing changes in the role, function and authority of the VSS are needed to create a more appropriate legal basis for their active and effective participation in the process of developing and implementing reform policies for the medical care service provision system.
- Develop a contracting mechanism and implement contracts between VSS and hospitals using the new provider payment mechanisms, with clear contractual agreements on the amount to be paid determined in advance, based on activities that are measured using appropriate indicators on types of services, quantities and quality of services, and especially the responsibility to implement the agreed contract conditions.
- Strengthen capacity to implement medical auditing and financial auditing for VSS. Program to strengthen this capacity requires investments, systematic preparation from technical capacity and development of policy documents, reforms of supervisory work and VSS auditing.

#### 12. Roadmap for achieving universal health insurance coverage

### 12.1. Stipulate more concretely the responsibility of the local people's committees

- Issue sublegal documents that provide adequate details on state management of health insurance for the people's committees at all levels, and at the same time stipulate clearly the responsibility of the people's committees in implementing the policy, and legislation on health insurance, and consider expansion of coverage and ensuring the rights of people participating in health insurance as a criteria for socio-economic development in the localities.
- Develop an official procedure to monitor and regulate activities of all parties implementing health insurance policy.
- Set up health insurance offices directly under the provincial health bureaus to implement the function of state management of health insurance.

### **12.2.** Implement the mechanism to subsidize contributions and support entitlements of the near poor who participate in health insurance

- Increase subsidies for contributions to health insurance from 50% to 70 or 80% and eventually 100% of the premium for members of near poor households.
- Reduce the co-payment rate of 20% to 5% of medical costs for the near poor, and specify a concrete ceiling (maximum) on co-payments each year.
- Implement behavior change communication on health insurance participation to inform the near poor of their rights and responsibilities.

## 12.3. Promote implementation of the legislation on health insurance participation for workers in enterprises

- Step up inspections, verification of compliance with health insurance at enterprises, and at the same time check on implementation of collection of contributions for health insurance by the VSS.
- Issue early on a decree on penalties for administrative violations in health insurance and create conditions consistent for implementation of the decree once it is issued.
- Information campaigns on responsibility and duty of employers and rights to health insurance of workers, implement the health insurance legislation; business cultural values, business ethics, and at the same time make widely known and ensure clear understanding of the penalties imposed in the area of violations of health insurance regulations for all parties participating in health insurance.

#### 12.4. Expand health insurance for the informal sector

- Develop a concrete roadmap for development of health insurance for informal sector workers including: target groups, timing, resources and organization of implementation.
- Develop information strategies aimed at increasing awareness of health insurance policy among workers in the informal sector.

- Improve the services of the health insurance sector in the direction of greater proactiveness, increased sense of responsibility, facilitating people to participate in health insurance.
- Research in order to shift from health insurance for individuals to health insurance for families.

#### 12.5. Reform the management model for health insurance

- Develop a project for comprehensive reform of the health insurance management model with an orientation towards establishing a health insurance system independent from the VSS and managed by the Ministry of Health, with strong decentralized management for localities. First of all, set up health insurance management committees with the Minister of Health as committee chairman (independent of the current health insurance management board).
- Revise, supplement current regulations on the role, responsibility of state management agencies on social security; relationship between the VSS and health care facilities.
- Revise several articles in the Law on Health Insurance, determine clearly the organizational structure of health insurance within the Law itself.

#### 12.6. Ensure depth of coverage and health insurance benefits.

- Strengthen capacity and medical equipment, physical facilities of health care providers at the lowest levels (district and commune), and professional decentralization to meet demand, and appropriate with changing morbidity patterns.
- Develop standard treatment protocols and hospital quality monitoring processes.
- Stipulate the ceiling of co-payments per person per year.
- Raise the standards and transparency in health insurance management.

#### 13. Refine the process of health policymaking

The measures below are recommended for implementation in order to reach the objectives of developing sufficient policies to meet demand, promulgating policies that are not conflicting with other policies and limiting unwanted effects, while meeting the goals of equity and efficiency in the health system.

- Develop and implement a comprehensive agenda for making policies, strategies and operational mechanisms for the next 10 years, with investment of an appropriate level of resources in terms of staff, finance, information and support from health partners.
- Develop and supplement mechanisms and methods to gather feedback on policy proposals, information, evidence, for policy making work. The Ministry of Health should organize a network of policy research agencies and units, organizations and groups of experts to provide policy advice in different fields, to synthesize information and evidence, and to advise on identification of problems to propose for inclusion in the policy-making agenda, aimed at ensuring that major health problems are not neglected;
- Develop a detailed process for policymaking in the health sector, including a process for each stage of the policy cycle: problem determination for inclusion in the policymaking agenda, policy analysis, seeking advice, gathering feedback from representatives of stakeholders, experts, agencies and research institutes;

- Develop assessment instruments and pilot test a survey to assess the satisfaction of the people related to health service delivery issues (administrative procedures, attitudes of medical personnel, informal user fees,...). Expand the scope of patient satisfaction surveys, aiming at period surveys of people's satisfaction with health services; take the results of these surveys to contribute to reorienting policy-making;
- Develop and pilot a standard procedure for regulatory impact assessment of draft policies (RIA); strive to refine and issue a detailed procedure for RIA reports on health policies by 2015.
- Ensure the participation of experts with adequate competence and with sufficiently high level of representativeness in the process of advising policy-making and implementing evidence-based policy analysis in order to improve the quality of policy analysis and ensure objectivity and autonomy in policy-making.
- Implement gathering of feedback on draft policies from many experts in the same level, in the same field (peer review) in the process of policy analysis aimed at improving the quality of policy analysis and ensuring the participation of a large number of experts in the relevant field in the drafting of policy options.
- In drafting policies, all policy options need to have a report analyzing results of piloting, and lessons drawn from successes and failures in Vietnam and in other countries.
- Strengthen policy-making capacity of the Ministry of Health, through adjustments in functions and tasks; prioritize resources for macro management activities – policy development, reduce responsibility for direct management of service provision units under the Ministry of Health.
- Strengthen international cooperation: Place refinement of the policy cycle as a focal issue in cooperation and dialogue between the Ministry of Health and the Health Partnership group (HPG).

#### 14. Strengthen capacity for health sector policy-making

#### 14.1. Strengthen training, retraining of policy-making capacity

- Ministry of Health to direct and organize training courses for government experts and leaders in the departments and administrations of the Ministry of Health on: (i) policy-making process, with emphasis on developing evidence-based policies and (ii) policy advocacy skills.
- Organize workshops, seminars to advocate for the need to implement analysis, synthesis of available information or to implement nationally representative surveys in specific priority areas in order to provide accurate and comprehensive information for policy-making. In the long-term, there is a need for a strategy for investing funds to implement periodic national surveys in priority areas on a periodic basis.
- Develop a comprehensive and unified policy in order to have a health system management model appropriate for both the public and private sectors.
- Emphasize the importance of planning for implementation of health policies. Open periodic training courses for key officials at all levels in planning for implementation of health policies using resources from multiple sources.

- Expand the coverage of the project implemented by the Health Strategy and Policy Institute on evidence-based policy-making by widely sharing information and results of the project. Share results achieved by the EVIPNET project.
- Strive to institutionalize capacity in policy-making for officials involved in this work at the Ministry of Health. In addition, it should be made a mandatory criteria to have a certificate of training in policy-making for officials in state management agencies in the health sector.
- Develop and implement a process for monitoring and evaluation of health policies in general and for policies related to the private sector in particular, to assist health officials in the commune and district levels to monitor and evaluate the quality of private health services. The Ministry of Health needs a plan to provide additional resources for units that monitor and supervise the private medical and pharmaceutical sector (human resources, funds, etc.) in order to ensure implementation of these tasks.
- Require a certificate of training in hospital management for all hospital management staff in the public and private sectors.

#### 14.2. Strengthen capacity to provide evidence for policy-making

- Organize training courses to strengthen capacity of researchers to synthesize results of their research, transform these results into appropriate forms for policy-makers (policy briefs, fact sheets, etc.), and skills needed for research (research design, implementation of research, analysis of data, report writing, communication of policies), skills for implementing systematic reviews, advanced data analysis in order to exploit more fully the available health databases for policy-making. In the long-term, regulations should be developed on skills required among researchers so they can effectively implement their responsibilities.
- Develop a plan for training and using a workforce of health officials and experts in various specialties within the health system in order to play a role in providing technical advice in the process of policy-making.
- Organize Flagship courses on health reforms after adjusting contents to be in-line with the Vietnamese context and implement the courses widely.
- Link up various facilities that specialize in providing evidence for policy-makers (institutes, universities), set up joint databases, provide and share information with all researchers and units in order to strengthen resources for implementing research of high quality.
- Strengthen the health management information system and databases with data from multiple information sources, and ensure easy access for data users.
- Organize an advisory workshop involving policymakers, researchers and other stakeholders to set out a priority research agenda in the health sector. Long-term solution requires developing an annual process for determining priority orientations for research and mobilization of funds to meet priority research needs of the health sector.

### Appendix 1: Summary of proposed tasks, priority problems and solutions

# I. Proposed tasks and solutions for continued implementation (based on overview chapters)

#### 1. Human resources for health

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
<ul> <li>Develop a health manpower adequate in numbers, structure and with a more balanced distribution</li> </ul>	<ul> <li>Health workforce is not distributed evenly across regions</li> <li>Inappropriate policies for using, recruiting health workers (low income).</li> <li>Apparent shift in health workforce from mountainous to delta areas, from lower levels to higher levels, from preventive to curative care.</li> <li>Shortage of health workers for certain specializations like tuberculosis, leprosy, mental health, preventive medicine because of low income, and poor working conditions</li> </ul>	<ul> <li>Continue to develop policies with an appropriate priority on disadvantaged regions, and fields lacking health workers like tuberculosis, leprosy, mental health.</li> <li>Study a model for using health workers that is appropriate for disadvantaged regions.</li> <li>Improve the health manpower information system (including private sector health workers)</li> <li>Assess effectiveness of various forms of training used in recent years, especially related to the goal of providing health workers to mountainous, remote, isolated regions, lower level facilities. Based on results of the assessment, make appropriate adjustments.</li> </ul>
<ul> <li>Improve quality of training and ensure performance of health workers</li> </ul>	<ul> <li>Quality of health worker training and education does not yet meet requirements.</li> <li>The education accreditation system lacks indicators specific to medical training.</li> <li>There is a lack of regulations on training, retraining for health workers to satisfy requirements of the Law on Examination and Treatment.</li> <li>Many retraining courses lack trainees because health facilities are short of staff and some health workers don't want to go for training far from home.</li> </ul>	<ul> <li>Develop a comprehensive long term plan for reforming medical training for the entire medical training system, using lessons learned from Vietnam and other countries.</li> <li>Develop criteria for accreditation specific to training in health sciences fields and apply this in the general education quality accreditation system.</li> <li>Develop a long-term comprehensive plan and regulations on retraining, continuing medical education to meet the requirements for updating knowledge of health workers in the Law on Examination and Treatment.</li> <li>Diversify forms of retraining, capacity strengthening for health workers, paying special attention to distance</li> </ul>

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
	<ul> <li>Competency standards for each type of health worker are not yet in place to serve as a standard for outputs of the training system.</li> </ul>	<ul><li>learning, e-learning and methods appropriate for health workers in disadvantaged regions.</li><li>Develop competency standards for each type of health worker.</li></ul>

### 2. Health financing

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
<ul> <li>State budget spending on health should reach 10% of total state budget spending.</li> </ul>	<ul> <li>Macro-economic difficulties led to tightening of the state budget, reduction in public spending, limitations in issuing government bonds.</li> </ul>	<ul> <li>Develop and implement a mid-term expenditure plan for the coming period.</li> </ul>
<ul> <li>Reform the mechanism for allocating state budget to health facilities based on performance and output indicators.</li> </ul>	<ul> <li>There are not yet guidelines for allocating state budget based on performance and output indicators.</li> </ul>	<ul> <li>The Ministry of Health should issue guidelines for allocating state budget based on performance, and output indicators.</li> </ul>
<ul> <li>Reform the operational mechanism, especially the financing mechanism of public health facilities towards autonomy with transparency and openness.</li> </ul>	<ul> <li>A regulatory impact assessment has not yet been implemented on the proposed Decree reforming the operational and financial mechanisms applied to state health service facilities</li> <li>Some socio-economic environment conditions and health sector factors are not yet appropriate for implementing autonomy in state health facilities.</li> <li>Monitoring, checking on autonomous activities has not yet been implemented due to limitations in manpower and instruments.</li> </ul>	<ul> <li>There is a need to implement a regulatory impact assessment of the proposed Decree on reforming the operational and financial mechanisms of state health facilities.</li> <li>Develop an internally consistent policy and harmonize the process of autonomization in the health sector with external factors.</li> <li>Strengthen capacity for state management in implementation of autonomy in state health facilities.</li> </ul>
<ul> <li>Strengthen effectiveness in use of existing financial resources.</li> </ul>	<ul> <li>There is not yet effective control over overprescription of pharmaceuticals and diagnostics.</li> </ul>	<ul> <li>Strengthen control to ensure rational prescription of pharmaceuticals, diagnostic services based on practice guidelines.</li> </ul>
	<ul> <li>There is a lack of information on cost- effectiveness of medical interventions.</li> <li>There is not yet a complete assessment of</li> </ul>	<ul> <li>Strongly promote use of information on cost- effectiveness in deciding on medical interventions (programs, pharmaceuticals, diagnostics)</li> </ul>

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
	malfeasance in the health sector.	<ul> <li>There is a need for a rigorous assessment of malfeasance in the health sector with proposals for appropriate anti-corruption measures.</li> </ul>
<ul> <li>Control health care costs, reduce gradually the share of total health spending that comes directly from out-of-pocket spending of the people.</li> </ul>	<ul> <li>Out-of-pocket spending on health remains at high levels compared to the WHO recommendation (30% of total health spending).</li> <li>The proportion of households facing catastrophic health spending remains high and has not fallen over time.</li> <li>Fee-for-service remains the primary mechanism for provider payments and is causing many abuses.</li> </ul>	<ul> <li>There is a need to speed up the development of standard treatment guidelines for common medical conditions. A regular and effective mechanism for monitoring of pharmaceutical and medical service prices needs to be set up.</li> <li>Develop a plan and roadmap for reforming hospital payments.</li> </ul>

### **3.** Pharmaceuticals, medical equipment and infrastructure

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
<ul> <li>Strengthen appropriate use of antibiotics</li> </ul>	<ul> <li>Antibiotic use in hospitals, the community and in livestock raising has not yet been supervised.</li> </ul>	<ul> <li>Set up a surveillance network on antibiotic use in hospitals and in the community.</li> </ul>
		<ul> <li>Collaborate with the Ministry of Agriculture and Rural Development for supervision of antibiotic use in livestock and poultry raising and aquaculture.</li> </ul>
<ul> <li>Tightly control pharmaceutical prices</li> </ul>	<ul> <li>Some measures for controlling drug prices have not yet been incorporated into policies or revised in a timely fashion.</li> </ul>	<ul> <li>Establish a pharmaceutical price control mechanism with the participation of agencies inside and outside the health sector.</li> </ul>
		<ul> <li>Supplement and complete mechanisms for pharmaceutical price controls (such as competitive bidding procedures, regulations capping wholesale margins, etc. for essential drugs, and a mechanism of administrative penalties for violations)</li> </ul>
		<ul> <li>Determine some (or all) essential drugs and propose that the state support prices when market prices fluctuate widely.</li> </ul>

<ul> <li>Implement effectively existing regulations</li> </ul>	<ul> <li>Many regulations related to use and circulation of pharmaceuticals have not yet been implemented.</li> </ul>	<ul> <li>Impose severe penalties for violations of existing regulations, for example the prescription drug regulations.</li> </ul>
<ul> <li>Invest in appropriate technology for each level.</li> </ul>	<ul> <li>There is a lack of concern about the most basic equipment needs at the grassroots level.</li> </ul>	<ul> <li>Update the essential medical equipment lists for different level facilities.</li> </ul>
<ul> <li>Promote basic investments in health facilities</li> </ul>	<ul> <li>State budget (local and central) does not meet the rapidly growing need for medical infrastructure.</li> </ul>	<ul> <li>Increase social resources invested in medical infrastructure.</li> </ul>

#### 4. Health information

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
1. Finalize policies, plans for development of the health information system.	<ul> <li>Plans for development of the health information system have still not been issued. After they are issued, additional documents to guide implementation will have to be developed.</li> <li>Regulations have not yet been developed on collaboration and information sharing within the</li> </ul>	<ul> <li>Develop and finalize policies on health management information systems to create effective conditions to satisfy the need for a legal framework for both the public and private health sectors in relation to provision of health information data.</li> <li>Develop and implement legal documents regulating</li> </ul>
	<ul> <li>health sector and with other relevant ministries.</li> <li>There is a lack of documents regulating responsibilities and obligations for updating information, reporting data on health service provision activities of private medical and</li> </ul>	organization of manpower, budget for statistical activities at all levels, with clear stipulations of the functions and responsibility of the leaders, statistical workers from the central, provincial, district to the commune levels.
	provision activities of private medical and pharmaceutical facilities.	<ul> <li>Review and revise the system of indicators, registers, health statistic reports, guidelines on health</li> </ul>
	<ul> <li>The systems of indicators, registers and statistical reports, guiding documents on the health management information system, hospital, preventive medicine and disease control information have not been finalized.</li> </ul>	management information, hospital information, preventive medicine information and control of epidemics, information related to teaching and research. Decentralize responsibility for the indicator system to each level. Develop indicator dictionary.
2. Strengthen capacity to meet the needs of data users	<ul> <li>Statistical data quality has not yet been evaluated according to 6 criteria of quality (relevance, accuracy, timeliness, accessibility, comparability and coherence).</li> </ul>	<ul> <li>Close cooperation on collection, processing, provision and sharing of information within the Ministry of Health and with related ministries and agencies like the Gene Statistical Office, the Ministry of Finance, Ministry of</li> </ul>
	<ul> <li>Information in some areas is still lacking, for example the private health sector, cause of death, risk factors for non-communicable</li> </ul>	Justice, General Administration of Population and Family Planning, VSS and other sectors. Strengthen dissemination of information in different and diverse

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
	diseases, "socialization" activities of state health facilities, detailed information on health manpower, Non-communicable disease registration and death registration in the community have not yet been strengthened.	<ul> <li>forms appropriate for data users.</li> <li>Develop a center for integration of health information data to ensure unified, concentrated management with one focal point, allocate responsibility for data collection and data sharing.</li> </ul>
	<ul> <li>A proposal to mobilize funds to implement a second National Health Survey has not yet been developed.</li> <li>The proportion of statistical indicators in the Health Statistics Yearbook that are disaggregated by sex remain low.</li> </ul>	<ul> <li>Gradually modernize the health information system appropriate with financial, technical ability and with the data needs of different levels of the health system, including activities to upgrade, develop and apply software for management, processing, transmitting and archiving information, ensure that all levels can process relevant reports.</li> </ul>
3. Strengthen dissemination of information, analysis and use of statistical data.	<ul> <li>Clear and concrete health information dissemination and sharing policies have not yet been developed, statistical data are disseminated quite late limiting their usefulness.</li> <li>The Health Statistics Yearbook has not yet been put on the internet, is slow to be printed each year compared to the needs of users.</li> </ul>	<ul> <li>Organize an in-depth and comprehensive assessment of the periodic reporting system to identify aspects that are acceptable, and difficulties that need to be resolved, while at the same time put in place sanctions for administrative violations in statistics.</li> <li>Develop a mechanism and create resources to strengthen dissemination and sharing of health</li> </ul>
	<ul> <li>The ability to analyze and use data has not yet been adequately strengthened. Statistical data are only analyzed at a basic level, with simple information products, but in-depth analysis and use of health statistics data for planning and policy-making remains limited.</li> </ul>	information through many different channels.
	<ul> <li>Many information sources lack a mechanism for dissemination, release of data making them difficult to access; Knowledge on use of data for analysis, evaluation, forecasting by public managers, planners and statisticians at all levels remains limited; database archives at all levels are weak, do not include relevant data from alternative sources; data are not managed in a scientific manner, and are slow to apply modern technologies for updating, archiving and</li> </ul>	

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
	transmitting data.	

#### 5. Primary health care, preventive medicine and national health target programs

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
1. Prevent major outbreak, cope with newly emerging diseases.	<ul> <li>Shortage of professional staff.</li> <li>Few professional staff have experience, excellent professional skills and effective training.</li> <li>Monitoring, surveillance, disease control at the commune and district levels is weak.</li> <li>Outbreaks of dengue fever, hand-foot-mouth disease have occurred in many southern localities in the first 6 months of 2011.</li> <li>Awareness of disease prevention and control among the population and local grassroots level authorities in many places remains low.</li> </ul>	<ul> <li>Strengthen short- and long-term training of young health workers for specialization in preventive medicine.</li> <li>Open training courses for grassroots health workers when programs/ projects are implemented.</li> <li>Consolidate organization and activities of the commune health station. Implement new benchmarks for commune health care.</li> <li>Strengthen support, supervision from higher level facilities in all areas of preventive medicine for lower level facilities.</li> <li>Implement fully the health worker remuneration policy for preventive medicine workers that has recently been issued by the Government (salary, allowances).</li> </ul>
2.Control of HIV/AIDS, tuberculosis, leprosy, malaria, dengue fever, and other communicable diseases. Expanded program on immunization	<ul> <li>Risk of mother to child transmission of HIV/AIDS has not been adequately controlled. Provision of ARV treatment remains limited</li> <li>Multi-drug resistant tuberculosis is being detected.</li> <li>Dengue fever remains widespread (nearly 100 000 people infected).</li> <li>Few grassroots health workers have received training in the expanded program on immunizations, with clear consequences for quality of vaccination services.</li> <li>Increasing trend in sexual transmission of HIV infection. Stigmatization of people living with</li> </ul>	<ul> <li>Strengthen IEC and policy advocacy at the grassroots level.</li> <li>Strengthen the amount and quality of health IEC related to HIV/AIDS control and other dangerous communicable diseases at the central and local levels.</li> <li>Diversify messages and forms of IEC so target audiences can absorb the knowledge and change behavior.</li> <li>Consolidate the commune and village health networks, maintain effective operations.</li> <li>Strengthen support, supervision, and early detection of epidemic diseases.</li> </ul>

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
	HIV/AIDS has not been eradicated.	
3. Improve food quality and ensure food safety and hygiene.	<ul> <li>The health sector has only recently been given responsibility to serve as the focal point to ensure food safety; intersectoral cooperation has only begun to be improved.</li> <li>Physical facilities, equipment, financial and human resources in the health sector for food hygiene and safety remains weak at the provincial and district levels.</li> <li>Habits of the people in production, buying, selling, processing and using unhygienic foods have not improved much over time.</li> <li>Checking, inspection, surveillance of food hygiene and safety are not yet widely implemented, especially in small-scale food production and distribution facilities, in traditional markets and in rural areas.</li> <li>Large-scale food poisoning incidents are still occurring, especially in industrial zones.</li> </ul>	<ul> <li>Continue to supplement, complete legal documents on food safety and hygiene to clarify responsibilities for implementation.</li> <li>Continue to invest in human resource training, equipment, infrastructure for food hygiene and safety work at the central, provincial and district levels.</li> <li>Strengthen and increase the number and quality of food safety inspections of food processing facilities, communal eating halls, public eating facilities.</li> <li>Promote health IEC on food hygiene and safety in the community, in schools, in enterprises and in the mass media.</li> </ul>
<ul> <li>4. Manage the health environment, control risk factors to health due to pollution, unhealthy lifestyles. Specifically:</li> <li>Manage medical waste</li> <li>Manage occupational health.</li> <li>Control accidents and injuries.</li> <li>Community environmental health.</li> <li>Cope with natural disasters, and climate change.</li> <li>Health related to lifestyle, school health, health of the elderly.</li> </ul>	<ul> <li>Environmental pollution is increasing as industrialization, urbanization and population increase.</li> <li>Activities in treatment of medical waste, labor hygiene and safety, control of accidents and injuries, school health, health care of the elderly have only begun to see some initial successes.</li> <li>Many weaknesses remain and there is a lack of necessary resources.</li> <li>Intersectoral cooperation remains weak at many levels in some areas of public health (accidents, injuries, occupational health, domestic violence, tobacco control and harm reduction related to alcohol use).</li> <li>National plan for control of non-communicable</li> </ul>	<ul> <li>Promote health IEC to improve awareness and practice of the community and leadership on health protection and environmental protection, developing healthy lifestyles.</li> <li>Implement effectively national health target programs/projects in 2011 in all localities including preventive medicine programs.</li> <li>Policy advocacy so the National Assembly passes the Law on Tobacco Control in the first quarter of 2012.</li> <li>Tight inter-sectoral collaboration to jointly resolve health problems requiring actions from multiple ministries and agencies.</li> <li>Strengthen international cooperation to take advantage of technical support, international experts and financial support in all preventive medicine programs and</li> </ul>

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
	disease for the period 2011–2015 has been drafted, but not yet promulgated.	projects.
5. Complete the model of organization and consolidate the grassroots health network.	<ul> <li>The grassroots health system faces many pressures of a high workload, but inadequate investments in professional training, physical facilities, equipment, financing and personnel policy.</li> <li>Guidance for the grassroots level from many different departments and administrations of the Ministry of Health requires better coordination, integration.</li> </ul>	<ul> <li>Implement early and widely the national standards for preventive medicine following guidelines of the Ministry of Health.</li> <li>Strengthen provincial level support and supervision of preventive medicine, primary health care and national health target program/project act ivies at the district and commune levels.</li> </ul>
6. Strengthen health IEC.	<ul> <li>Awareness of government officials, the people about protection, care and promotion of the people's health remains limited. Harmful behavior remains common.</li> <li>People implementing health IEC often lack professional training so they have weak skills.</li> <li>IEC channels, forms and messages are not yet diverse, active, attractive.</li> <li>Campaigns to get physical exercise for health protection have not yet been widely developed, and effectively implemented in the community.</li> </ul>	<ul> <li>Continue to collaborate with communication agencies, television, radio, newspapers at the central and local levels, increase the frequency and quality of health protection and disease control information products.</li> <li>Encourage and support various forms of popular culture, performances with topics on preventive medicine in the community.</li> <li>Encourage and support the establishment and activities of health clubs for different demographic groups in the community.</li> </ul>

#### 6. Examination and Treatment

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
1. Access and equity		
<ul> <li>Decide on the district level health system organization.</li> </ul>	<ul> <li>The district health system model has not yet been unified.</li> </ul>	<ul> <li>Continue to assess implementation of Circular No. 3 to achieve a unified organizational model at the district level.</li> </ul>
<ul> <li>Create convenience and ensure rights of insured patients.</li> </ul>	<ul> <li>Referrals, administrative procedures, health insurance reimbursements remain complicated and difficult.</li> </ul>	<ul> <li>Implement provision of curative care services according to an adjusted referral system, improve procedures for providing medical services to insured patients</li> </ul>

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
2. Improve quality of examination and treatment services		
<ul> <li>Resolve overcrowded hospitals.</li> </ul>	<ul> <li>Overcrowding remains prevalent in central, provincial and some specialized hospitals.</li> </ul>	<ul> <li>Implement congruent policies in the short- and long-term to overcome hospital overcrowding.</li> </ul>
<ul> <li>Standardize quality of health services, hospital quality, gradually meet regional and international standards.</li> </ul>	<ul> <li>There is not yet a system of quality management in the health sector.</li> <li>Awareness of health sector managers about service quality management remains limited.</li> <li>Little attention has been paid to service quality to ensure patient satisfaction.</li> <li>Quality assurance models and methods are only implemented in a few hospitals.</li> </ul>	<ul> <li>Set up a quality management system for examination and treatment at the Ministry of Health, Provincial Health Bureaus, and at medical facilities after issuing a circular guiding implementation of hospital quality management.</li> <li>Promote the setting up of an organization to certify quality.</li> <li>Recognize selected foreign hospital quality standard systems.</li> <li>Strengthen advocacy, awareness raising, training on quality management in the health sector.</li> <li>Implement quality methods in medical facilities.</li> </ul>
<ul> <li>Improve medical ethics</li> </ul>	<ul> <li>The salary and salary supplements do not yet ensure that health workers receive appropriate levels of remuneration commensurate with the human capital and risks involved in health sector work.</li> <li>The market mechanism is negatively affecting health worker behavior.</li> </ul>	<ul> <li>Find a policy mechanism to improve salaries, income of public sector health workers.</li> <li>Strengthen checking, supervision of compliance with the Law on Examination and Treatment, and the statement of conduct in the health sector.</li> </ul>
<ul> <li>Supplement, update professional guidelines</li> </ul>	<ul> <li>There is a large number of professional guidelines, treatment guidelines, technical procedure guidelines, care pathways, with few resources for their implementation.</li> </ul>	<ul> <li>Continue to supplement, update professional guidelines, focused on common techniques, common diseases, widely used techniques.</li> <li>Pilot assessment of implementation of professional guidelines.</li> </ul>
<ul> <li>Complete the practice registration system; Continuously develop professional skills.</li> </ul>	<ul> <li>Decrees, circulars guiding issuing of practice licenses, permits have not yet been approved.</li> </ul>	<ul> <li>Implement practice licensing following the roadmap. Set up a system to register practitioners to support management of medical practitioners.</li> <li>Strengthen training to continuously update knowledge.</li> </ul>
3. Improve management capacity, strengthen effectiveness of medical		

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
examination and treatment.		
<ul> <li>Reform the operational mechanism and financial mechanism of state health facilities towards greater autonomy, transparency and openness.</li> </ul>	<ul> <li>The user fee schedule is outdated and no longer appropriate, it does not ensure recovery of the costs of providing examination and treatment services.</li> <li>The negative side of autonomization is causing hardship in reducing hospital overcrowding at higher levels and creates the risk of overprescription of pharmaceuticals, diagnostic and other technical services.</li> </ul>	<ul> <li>Supplement and revise the user fee schedule based on full costing that ensures the operation and development of the hospital.</li> <li>Reform the mechanism for state budget allocation and provider payments for curative care (extend use of capitation and pilot use of diagnostic related groups).</li> <li>Implement methods to control hospital costs.</li> </ul>
<ul> <li>Implement health technology assessment in order to control and eliminate use of ineffective technologies, drugs, techniques.</li> </ul>	<ul> <li>Health technology assessment has not yet been implemented, there is no experience to do so.</li> </ul>	<ul> <li>Pilot health technology assessment.</li> </ul>
<ul> <li>Evaluate and develop solutions to mobilize an appropriate level of social resources</li> </ul>	<ul> <li>Some problems have resulted from implementing joint ventures, partnerships, capital contributions to invest in hospital equipment.</li> </ul>	<ul> <li>Continue to evaluate joint ventures, partnerships, and other ways that the private sector participates in investments in state medical facilities in order to develop a form that is appropriate.</li> </ul>

### 7. Population, Family planning and Reproductive healthcare

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
<ul> <li>Maintain replacement fertility (TFR below 2.1).</li> <li>Ensure appropriate sex balance</li> </ul>	<ul> <li>28 out of 63 provinces have not yet reached replacement fertility, and others have seen an increase in fertility rate.</li> <li>Sex ratio at birth is increasing rapidly.</li> </ul>	<ul> <li>Develop and implement projects to implement the National Strategy on population and reproductive health</li> <li>Strengthen leadership to implement Resolution No. 47-</li> </ul>
Improve population quality.	<ul> <li>Population quality is slow to be ameliorated.</li> </ul>	<ul> <li>NQ/TW on population and family planning.</li> <li>Develop action plan on population and reproductive health for the period 2011–2015.</li> </ul>
<ul> <li>Implement reproductive health and maternal and child health effectively.</li> </ul>	<ul> <li>Health indicators of mothers and children in disadvantaged and mountainous regions show wide disparities compared to delta areas</li> </ul>	
	<ul> <li>Reproductive tract infections and sexually transmitted diseases remain widespread.</li> </ul>	
	<ul> <li>Screening for early detection of reproductive</li> </ul>	

Proposed task	Issues not yet resolved (Difficulties, limitations)	Recommended solutions (to put into the 2012 Annual plan)
	tract cancers has not yet been widely implemented.	
	<ul> <li>Reproductive health of specific target groups: youth, the disabled, the elderly, people in disadvantaged regions, has not been paid adequate attention.</li> </ul>	
<ul> <li>Strongly reduce the child malnutrition rate.</li> </ul>	<ul> <li>The risk of a double burden of malnutrition: under nutrition and overweight, obesity</li> </ul>	<ul> <li>Ministry of Health complete the National Nutrition Strategy for the period 2011–2020 early in order to submit it to the Government for approval.</li> </ul>
<ul> <li>Improve quality of reproductive health services including family</li> </ul>	<ul> <li>Reproductive health network lacks resources: human, financial and competency.</li> </ul>	<ul> <li>Develop and issue a master plan for the obstetrics- pediatrics network.</li> </ul>
planning		Invest state budget commensurate with the goals.
		<ul> <li>Strengthen training and retraining on the National Standard Guidelines for reproductive health services.</li> </ul>
		<ul> <li>Strengthen professional supervision of medical work at all levels.</li> </ul>

# II. Priority issues and solutions (based on in-depth chapters)

#### **1.** Reforming the health financing mechanism

	Solutions/actions				Results to be achieved by
Priority problem	Short-term (2012)	Long-term (2015)	2012		
<ul> <li>1. Limited financial resources</li> <li>Public health spending despite annual increases, still accounts for a low share of total health spending.</li> </ul>	<ul> <li>Increase public spending through state budget spending and especially by increasing health insurance coverage.</li> </ul>	<ul> <li>Strive by 2015 for public spending on health to reach and be maintained at over 50% of total health spending.</li> </ul>	<ul> <li>Increase health insurance coverage compared to 2011.</li> </ul>		
<ul> <li>Financing for preventive medicine remains low. Implementation of autonomy according to Decree 43 in preventive medicine units has not brought about the desired effects.</li> </ul>	<ul> <li>Eliminate payroll basis for state budget allocation to preventive medicine.</li> <li>Allocate state budget spending on preventive medicine to ensure recurrent spending such as: salary, electricity, water, etc. and following the annual work plans.</li> </ul>	<ul> <li>Pilot and implement performance related pay.</li> <li>Shift from fixed budget allocation according to Decree 43 to a fixed workload, and allocate state budget based on performance</li> </ul>	<ul> <li>Set up a mechanism to replace budget allocation to preventive medicine based on payroll.</li> </ul>		
<ul> <li>State budget allocation to hospitals is still on a per bed basis, with regressive subsidies, that don't encourage the people to use hospital services at lower levels of the system.</li> </ul>	<ul> <li>Eliminate the per bed basis for state budget allocation to hospitals</li> <li>Implement a mechanism to allocate state budget to hospitals through support to salary, with lower level hospitals receiving a greater subsidy and higher level hospitals receiving a lower subsidy, income of health workers will depend on hospital performance.</li> </ul>		<ul> <li>Document to recommend elimination of the per bed basis for allocation of state budget to hospitals.</li> <li>Document recommending implementation of a mechanism that allocates state budget to hospitals through support to salaries, ensuring income of hospital staff through hospital performance.</li> </ul>		
2. Ineffective use of financial resources					

<ul> <li>Hospital service charges are escalating out of control, due in part to overprescription of pharmaceuticals and diagnostics, which lead to wasted resources.</li> </ul>	<ul> <li>Timely changes to resolve problems with fee-for-service and capitation payments to providers.</li> <li>Implement full accounting for costs and ensuring transparency.</li> </ul>	<ul> <li>Pilot and expand application of DRG payments.</li> </ul>	<ul> <li>Pilot test DRG payments</li> </ul>
Health financing system has not yet create the incentives for effective performance of health workers.	<ul> <li>Full costing of health services, applying case mix or capitation payments, in this way encouraging health workers to provide services more efficiently, economically, and according to care pathways, to serve as a basis for payment of remuneration based on performance.</li> <li>Implement effectively Government decisions that increase various salary supplements in the health sector,</li> <li>Implement effectively investment projects according to Decision 47/TTg, Decision 930/TTg and Decision 950/TTg to invest in provincial and district general hospitals and commune health stations.</li> </ul>	<ul> <li>Study to make fundamental reforms in remuneration that are appropriate for employees in health service provision, overcoming any irrational increases in income.</li> </ul>	<ul> <li>Propose a reform option involving performance related pay for health workers in health service provision.</li> <li>Implement effectively investment projects according to Decision 47- TTg, Decision 930-TTg and Decision 950-TTg.</li> </ul>
<ul> <li>The effectiveness of procurement and use of costly medical equipment has not yet been assessed.</li> </ul>	<ul> <li>Evaluate effectiveness of procurement and use of costly medical equipment.</li> <li>Direct health facilities and localities to increases accountability in controlling procurement of pharmaceuticals, medical equipment in order to ensure effective use of the health sector's limited resources.</li> </ul>	<ul> <li>Develop a mechanism to control procurement and use of costly medical equipment.</li> </ul>	<ul> <li>Research project to evaluate effectiveness of procurement and use of medical equipment.</li> <li>Documents directing health facilities and localities to control procurement of pharmaceuticals and medical equipment.</li> </ul>
<ul> <li>State budget support for the near poor and a few other target groups to purchase health insurance has been underutilized.</li> </ul>	<ul> <li>Develop a Healthcare Support Fund aimed at supporting the near poor, people without health insurance when they face sudden difficulties related to high health care costs to avoid the</li> </ul>	<ul> <li>Increase effectiveness of support for the poor, near poor and other policy target groups through support in buying health insurance, overcoming reverse</li> </ul>	<ul> <li>Documents recommending an increase in the level of support to encourage the near poor to purchase</li> </ul>

	<ul> <li>medical poverty trap.</li> <li>Revise and amend mechanisms to provide support for inpatient care from the Healthcare Support Fund for the poor, ethnic minorities, living in disadvantaged areas.</li> </ul>	subsidies (when health insurance funds are transferred from disadvantaged areas with a surplus to better off areas with a deficit)	<ul> <li>health insurance.</li> <li>Documents recommending development of a health care fund for the near poor, people who don't yet have health insurance, and for urgent unexpected difficulties as they arise.</li> <li>Reform management of the use of the health insurance fund in disadvantaged regions.</li> </ul>
<ul> <li>State management of health financing is not yet strong enough to strengthen effectiveness and transparency in use of resources.</li> </ul>	<ul> <li>Strengthen the state management role through management mechanisms and strengthened hospital governance, ensuring openness and transparency.</li> <li>Increase state budget support for hospitals at the district level, in mountainous areas, and hospitals specializing in tuberculosis and lung disease, leprosy, etc.</li> </ul>	<ul> <li>Continue to refine the financial management mechanism in the health sector, particularly in hospitals.</li> <li>Continue to take the perspective that health services, as a special type of product, requires a stronger state management role; and on this basis issue a consistent policy mechanisms, create a mechanism so hospitals operate to provide quality services in an efficient manner, ensure equity, prevent people from falling into the medical poverty trap.</li> </ul>	<ul> <li>Continue to refine the autonomy mechanism applied in state health facilities, ensure transparency and openness.</li> <li>Set up a method for hospital financial management.</li> <li>Increase state budget support for hospitals at the district level, in mountainous areas, specialized in lung disease, mental illness, leprosy, etc.</li> </ul>

#### 2. Provider payment reforms in medical examination and treatment services

	Solutions/actions		Results to be achieved in
Priority problem	Short-term (2012)	Long-term (2015)	2012
1. Lack of a strong and clear direction			
for provider payment reforms			

<ul> <li>Lack of awareness of the dominant effect of provider payments on trends in use of services and incentives within the health service provider network underlies the lack of attention to developing a master plan for in-depth reforms to provider payments</li> <li>Lack of an appropriate commitment at the level that will approve and issue policies to promote and supervise implementation.</li> <li>Fee-for-service payments are revealing many limitations and negative effects.</li> </ul>	<ul> <li>Strengthen advocacy for a policy orientation and policy documents for reform of provider payments Policy advocacy to achieve a consensus on an overall action plan, with a clear roadmap from pilot testing, evaluation to scaling up.</li> <li>Develop a comprehensive plan for deep reforms of provider payment mechanism.</li> </ul>	Institutionalize requirements and objectives of reforms through legal documents and guiding documents to implement reforms (Law on Examination and Treatment, Law on Health Insurance)	<ul> <li>Memorandum of understanding, notice of activity results/ policy advocacy workshops and policy dissemination workshops.</li> <li>Reporting evaluating results and activity plan for the upcoming period (Evaluation of pilot test of case mix payments after 2 years of implementation, dissemination of activity plan for reforming provider payment mechanism)</li> <li>Comprehensive plan approved by the Minister of Health.</li> </ul>
2. Capacity and resources to study application of improved payment			
systems are limited.			<b>-</b>
<ul> <li>Inadequate collaboration between relevant departments and administrations in the process of reforming provider payments.</li> <li>Inadequate investment in human and financial resources for research on application of alternative provider payment mechanisms.</li> </ul>	<ul> <li>Set up a technical unit specializing in research and implementation of provider payment reforms.</li> <li>Planning and Finance Department the focal point for drafting the plan of organization and activities so the technical unit can be set. The operating budget of this unit will be allocated from the Project on health human resources development (ADB).</li> <li>Priority training to strengthen capacity for research and application of new provider payment mechanisms including DRG and capitation.</li> <li>Steering committee for provider</li> </ul>	<ul> <li>Develop a recurrent budget mechanism, together with the budget from grants and loans, to support a continuous process of adjustment and updating of the methodology and contents of the provider payment mechanism (databases and evidence for developing policies and related documents).</li> <li>Roadmap for application of improved provider payment mechanisms to replace direct payments, with the first step being a harmonized integration of capitation and DRG.</li> </ul>	<ul> <li>Technical unit is established and functioning</li> <li>Plan for organization and activities of the Steering Committee and Technical unit are approved with concrete contents related to human resources and financial resources</li> <li>Progress report (Technical unit reports to the Steering Committee) every quarter about the activity program for provider payment reforms.</li> </ul>

	payment reforms operating on a regular basis, with clear responsibilities allocated to different departments and administrations (Medical Services Administration, Planning and Finance Department, Health Insurance Department) and supervising and promoting the process of implementing the overall plan for reforms.	<ul> <li>Case mix payments implemented in at least 24 hospitals at different levels, for 24 common conditions.</li> </ul>	
<ul> <li>Inadequate attention to comprehensive research of new provider payment mechanisms, including case mix, capitation and others.</li> </ul>	<ul> <li>Develop a methodology and implement costing of capitation to cover primary health care.</li> <li>Develop a methodology and implement costing by diagnostic related group for hospital services. This should be followed by a pilot at 4 hospitals, case mix payments will be applied to 20 common conditions with high frequency of inpatient admissions starting in 2013. There is already a commitment from the Government and the Ministry of Health in the project document for the ADB health human resources development project (Component 3- Strengthen capacity for management of service provision) using loan and non-refundable capital from ADB and AusAID.</li> <li>Results based financing pilot (may be based on integration of capitation, DRG and fee-for-service) is being researched and developed with financial and technical support from the World Bank. The design is now being developed and according to plans should be completed in 2011.</li> </ul>	<ul> <li>Mechanism and concrete program for strengthening specialized capacity for hospital costing and coding, and strengthening policy formulation related to managing prices and quality of health services.</li> </ul>	<ul> <li>Capitation amount and design of capitation payments are adjusted.</li> <li>Care pathways and cost database by diagnostic group is completed for 20 high frequency medical conditions (besides the care pathways already completed for 4 medical conditions, bringing the total care pathways to 24)</li> </ul>

<ul> <li>3. Medical care management information systems and capacity to manage supply and use of medical services do not yet meet new requirements</li> <li>System of clinical data and cost data, especially information in electronic form, is lacking, lacks standardization and is often out-of-date.</li> </ul>	<ul> <li>Priority development of disease and procedure classification systems (Clinical information classified using ICD-9-CM and ICD-10) to support and promote utilization of information technology in development, processing and utilization of evidence based on database information.</li> </ul>	<ul> <li>Formulate and develop a health management information system following a management model in line with performance-based payments.</li> <li>Medical procedure classifications following international standards (ICD-9-CM) and international classification of disease (applying ICD-10-AM) will be developed in 2012, the process of training, technology transfer and application of international classification systems in Vietnamese hospitals to begin in 2013.</li> </ul>	<ul> <li>Disease classification list according to ICD-10 and procedure classifications according to ICD-9-CM are completed (in a joint database containing both clinical and cost information)</li> </ul>
<ul> <li>Hospital management capacity, especially financial and service management remain limited.</li> <li>Limitations in the managerial and supervisory capacity of the purchasing agency, i.e. VSS</li> </ul>	<ul> <li>Strengthen training following the new financing and payment methods and pilot different payment mechanisms (capitation and case mix-DRG)</li> <li>Technical preparation and development of policy documents, reform supervision, health insurance auditing.</li> <li>Strengthen training, practical training on clinical and financial auditing.</li> </ul>	<ul> <li>Change the method of auditing/checking and supervision of medical examination and treatment.</li> </ul>	<ul> <li>Short-term training on provider payments is implemented.</li> </ul>
<ul> <li>Source of funding to pay for medical services is fragmented and the organizational model for service provision, payments and management</li> </ul>		<ul> <li>Pool all sources of financing to the greatest extent possible.</li> </ul>	

remains unclear.

#### **3. Roadmap for achieving universal health insurance coverage**

	Solutions/actions		Results to be achieved by
Priority problem	Short-term (2012)	Long-term (2015)	2012
1. Unclear responsibility of authorities at all levels regarding implementation of the health insurance policy, lack of accountability mechanism.	<ul> <li>Review, analyze relevant legal documents and synthesize research evaluating implementation of state management tasks in localities.</li> <li>Recommend the issuing of legal documents to make even more concrete state management of health insurance, tying responsibility of local authorities at all levels to implementation of health insurance policies.</li> <li>Strengthen implementation of Directive No. 38-CT/TW, dated 7 September 2009 of the Party Secretariat on health insurance in the new period.</li> </ul>	<ul> <li>Decree guiding implementation of state management of health insurance: Clearly and comprehensively stating the contents of state management; Localities should be active and bear the responsibility for performance in implementing the Law on Health Insurance; Clear mission statements for health agencies and VSS.</li> </ul>	<ul> <li>Submit to the Prime Minister a draft document to strengthen implementation of state management of health insurance by provincial people's committees. Contents should include: Checking inspecting, supervising, directing implementation of the Law on Health Insurance; Setting plans for health insurance coverage; Collaboration to resolve problems with health insurance among in- migrants.</li> <li>Plans in place to continue promotion of implementation of Directive No. 38-CT/TW, dated 7 September, 2009 of the Party Secretariat, with special attention paid to concrete criteria, including supervision and evaluation plans.</li> <li>Set up the health insurance office within the Provincial Health Bureaus to implement state</li> </ul>

			management functions in the localities.
2. Level of support to assist the near poor to participate in health insurance is not appropriate, and there is still a high co-insurance amount.	<ul> <li>Adjust level of subsidy to be appropriate with the ability to contribute of the near poor.</li> <li>Determine a ceiling for annual patient co-insurance payments (calculate in relation to the minimum wage).</li> <li>Continue communication activities to improve awareness of the people about their rights and responsibilities regarding participation in health insurance.</li> </ul>	<ul> <li>Revise Decree 62/2009/ND-CP in the direction of fully subsidizing health insurance contributions for the near poor.</li> <li>Consider recommendations to revise the Law on Health Insurance towards no distinction in health insurance entitlements between the poor and near poor.</li> <li>Strengthen communication to increase awareness of the people about health insurance.</li> </ul>	<ul> <li>Ministry of Health collaborate with various Ministries and sectoral agencies to make a set of recommendations to adjust the amount of subsidy appropriate with ability to contribute of the near poor (from 70% to 80% of contribution amount)</li> <li>Document in place to recommend reducing co- insurance of the near poor.</li> <li>Ministry of Health sends official letter to provincial people's committees to request allocation of budget for health insurance communication activities.</li> </ul>
3. Compliance with policies on compulsory participation in health insurance remains low, especially among private sector enterprise workers.	<ul> <li>Communication about responsibilities and obligations of employers to implement the Law on Examination and Treatment.</li> <li>Appropriate mechanism set up to deal with health insurance contributions in the case that the enterprise is facing difficulties.</li> <li>Create uniform conditions so the decree on penalties for administrative violations can be more targeted and effective.</li> <li>Improve effectiveness of the labor unions in protecting the rights of workers.</li> </ul>	<ul> <li>Review and recommend adjustments in various legal documents related to the Enterprise Law, Investment Law and Labor Union Law.</li> </ul>	<ul> <li>Collaborate to check on health insurance participation in some enterprises</li> <li>Check implementation of the role of collecting health insurance contributions within VSS</li> <li>Develop a plan to supervise implementation of the Decree of penalizing administrative violations related to health insurance after it is issued.</li> <li>Develop a communication program appropriate with the ability to access</li> </ul>

	nsform from individual e to family health	<ul> <li>Change the form of health insurance from individual insurance to family insurance in</li> </ul>	<ul> <li>Study how to transform health insurance based on the individual to health insurance based on the</li> </ul>
<ul> <li>insurance management currently does not ensure effectiveness and efficiency in state management of health insurance by the Ministry of Health</li> <li>Stipulate more c between health of VSS.</li> <li>Strengthen supe and checking of health insurance</li> <li>Upgrade equipment</li> </ul>	state management e agency e health insurance ls. clearly the relationship care facilities and ervision, inspection implementation of e. nent and refine the anism in the health	<ul> <li>order to speed up extension of coverage.</li> <li>Implement comprehensive assessment of the health insurance management model.</li> <li>Consider recommendations to revise selected articles in the Law on Health Insurance, in the direction of the Ministry of Health managing the health insurance system, ensuring the multisectoral and multidisciplinary managerial functions of the Ministry of Health.</li> <li>Develop a database system reliable enough to ensure a</li> </ul>	<ul> <li>household</li> <li>Set up a health insurance management board, with the Minister of Health as the board chairman (independent with the current social insurance management board)</li> <li>Recommend revisions in the current legal documents on the role, function and responsibilities of the state management agency and the implementing agency at all levels.</li> <li>Ministry of Health and</li> </ul>

			<ul> <li>particular agency to promulgate, or that are not in line with the relationship between different players participating in health insurance.</li> <li>Revise Circular No. 09/2009/TTLT, supplement regulations on the relationship between the care providers and the VSS.</li> </ul>
6. Health insurance entitlements do not yet ensure depth of coverage.	<ul> <li>Strengthen capacity and medical equipment at the district and commune level</li> <li>Study proposals to eliminate the 5% co-insurance requirement among the poor and ethnic minorities.</li> <li>Regulate the ceiling on co-insurance to an appropriate level to ensure that patients can afford to pay for health services.</li> <li>Strengthen managerial qualifications and transparency in management of the health insurance fund.</li> <li>Analyze health care costs by disease and characteristics of service provider.</li> </ul>	<ul> <li>Consider recommendations to revise the Law on Health Insurance, eliminate co- insurance payments for the poor, ethnic minorities.</li> <li>Consider revising Decree 62, stipulating an annual ceiling for co-insurance payments.</li> <li>Develop standard treatment protocols and procedures for supervision of hospital quality.</li> <li>Formalize legal arrangements to shift from direct subsidies to providers towards subsidies for participation in health insurance.</li> </ul>	<ul> <li>Document recommending elimination of the 5% co- insurance payment for the poor and ethnic minorities.</li> <li>Document recommending an annual ceiling on total co-insurance payments to ensure that people can afford to pay for health services.</li> <li>Plan to strengthen managerial qualifications and transparency in management of the health insurance fund.</li> </ul>

## 4. Policymaking in health system governance

	Solutions/a	Results to be achieved in	
Priority problem	Short-term (2012)	Long-term (2015)	2012
1. Limitations in agenda setting			

<ul> <li>Some major and urgent policy issues have not been considered for inclusion in the health policy agenda (public hospitals and the autonomy policy, primary health care,)</li> <li>Number and quality of policy research remains limited; Few policy issues are selected from research results.</li> <li>The level of satisfaction or feedback of the people have not yet been used as instruments to explore policy issues.</li> </ul>	<ul> <li>Organize periodic workshops to advise on macro-level health policy issues;</li> <li>Plan in place to study and identify major policy issues;</li> <li>Careful selection of organizations, individuals with good capacity to strengthen quality of research and participation in setting the policy agenda;</li> <li>Implement research on people's attitudes and satisfaction with health service quality.</li> </ul>	<ul> <li>Implement research to analyze the health service provision system and formulate options for reforming the health provider system appropriate with the socio-economic context of low middle income country.</li> </ul>	<ul> <li>Some major policy issues are proposed for inclusion in the policymaking agenda, based on analysis of evidence from research.</li> </ul>
<ul> <li>2. Limitations in policy analysis and formulation of policy options</li> <li>Situation analysis of various policy issues has not yet been thoroughly implemented so the underlying causes of problems have not yet been identified.</li> <li>Impact of health financing, provider payments, health service system organization, regulations, and behavior change communication (the 5 control knobs) has not been fully assessed in the process of considering the causes of policy problems.</li> <li>Inadequate investments in research of lessons learned from successes and failures in other countries.</li> <li>The importance of investing resources (human, time, financial) to implement regulatory impact assessments has not yet been fully appreciated.</li> <li>Results of regulatory impact assessment have not yet been used</li> </ul>	<ul> <li>Implement policy analysis research with using expertise from a multi-disciplinary team; seek opinions and feedback from a large number of people, all stakeholders must be consulted and peer review must be applied.</li> <li>Pilot implementation of regulatory impact assessment, with the participation of competent organizations and individuals with understanding of the relevant policy area and who have qualifications and skills to implement a regulatory impact assessment.</li> <li>Donors support systematic review of lessons learned from the world on relevant policy issues.</li> <li>Ensure transparency, accountability in formulating and proposing policy options to limit influence of special</li> </ul>	<ul> <li>Rigorously implement careful regulatory impact assessments on health policies before they are issued and in the process of implementation.</li> <li>Regulatory impact assessments must be implemented by independent research organizations with capacity to implement them.</li> <li>Organize situation analysis research carefully, analyze policies according to the 5 control knobs of the health system.</li> </ul>	<ul> <li>Hot policy problems such as hospital autonomy, hospital overcrowding, management of food hygiene, continue to be analyzed and policy options proposed.</li> </ul>

<ul> <li>effectively.</li> <li>Limitations in the mechanism to ensure participation of stakeholders (including the citizens) in consultations to contribute feedback to draft policies and to ensure independence, objectivity in research and evaluations.</li> </ul>	interest groups.		
<ul> <li>3. Limitations in policy decision- making</li> <li>Accountability is still not clear. There is no mechanism to ensure the personal responsibility of individuals when there are negative effects of policies that are issued.</li> <li>In many cases, no strategy is in place for appropriate persuasion and defense of policy proposals, so no consensus is reached on optimal policy choices.</li> <li>There is a shortage of officials with adequate reputation and qualifications to negotiate in the process of advocating and defending proposals.</li> <li>There is a lack of fora for appropriate and in-depth exchange between various parties with differences of opinion in order to work towards a consensus</li> </ul>	<ul> <li>Develop a personal accountability mechanism that covers negative effects of policies issued.</li> <li>Develop a strategy for persuasion, defense of each specific policy.</li> <li>Select officials with a good reputation and competency to present policy proposals.</li> <li>Utilize the development of policy briefs for all research to propose policies.</li> </ul>		<ul> <li>Strategy in place for persuasion aimed at achieving a consensus for all policies to be issued as legal documents by the National Assembly or Government.</li> </ul>
<ul> <li>4. Limitations in organization and process of policy-making</li> <li>Health policymaking process has not yet been updated; Policy research at a strategic level has not yet been organized (i.e. there are no think tanks)</li> <li>Government officials charged with</li> </ul>	<ul> <li>Determine the focal point to take responsibility for formulating the policymaking process; come to agreement on the health policymaking process.</li> <li>Set up strategic policy research</li> </ul>	<ul> <li>Issue a handbook on the health policy formulation process.</li> </ul>	<ul> <li>Reform in perspectives about methods and processes of health policy- making.</li> </ul>

<ul> <li>developing policies are usually overcommitted.</li> <li>Almost all stages in the policy cycle are still implemented directly by officials of the Ministry of Health, the role of active participation of officials outside the Ministry of Health and of independent experts is missing.</li> <li>Financial resources for developing policies are limited, inadequate to pay for even the most necessary evaluation research.</li> </ul>	<ul> <li>organization.</li> <li>Reduce direct management focus of the Ministry of Health;</li> <li>Invite independent experts to participate in policy-making.</li> <li>Increase financial resources for policy formulation.</li> </ul>		
5. Limitations in implementing and			
evaluating policies	- Strongthon communication activition	- Dut in place a machanism to	- Ministry of Health loads the
<ul> <li>Limitations in information, communication and inter-sectoral collaboration in the process of implementing health policies.</li> </ul>	<ul> <li>Strengthen communication activities; determine clearly the responsibility of different parties in policy implementation.</li> </ul>	<ul> <li>Put in place a mechanism to obtain the participation of occupational and social organizations in monitoring and</li> </ul>	<ul> <li>Ministry of Health leads the strengthening of capacity, resources and instruments for monitoring and</li> </ul>
<ul> <li>Some policies are not piloted to make timely adjustments and revisions before national implementation.</li> </ul>	<ul> <li>Organize pilot testing prior to issuing policies for nation-wide implementation.</li> </ul>	supervision activities.	supervision and formulates relevant regulations.
<ul> <li>Shortcomings in monitoring, supervision and implementation of policies; Lack of a role for occupational organizations in monitoring and supervision.</li> </ul>	<ul> <li>Strengthen capacity, resources, instruments for monitoring and supervision.</li> </ul>		

### 5. Strengthen capacity for health sector management and policy-making

	Solutions	/actions	Results to be achieved by
Priority problem	Short-term (2012)	Long-term (2015)	2012
1. Training, retraining of health sector			
managers to strengthen capacity for			
policy-making, does not yet meet			
requirements.			

<ul> <li>There are not yet systematic training courses on policy-making for key health officials (agenda setting, setting priorities, formulating, implementing, monitoring and evaluating policies).</li> </ul>	<ul> <li>The Ministry of Health should organize regular training courses to improve capacity for policy-making among experts, leaders of specialized departments and administrations.</li> <li>Ministry of Health take the lead in organizing training courses to improve skills in policy advocacy.</li> </ul>	<ul> <li>Institutionalize regulations on policy-making capacity for relevant Ministry of Health officials and other state management agencies related to health.</li> <li>Ministry of Health take the lead to organize seminars, workshops on the necessity of implementing analysis, synthesizing available information, and implementation of nation-wide surveys</li> </ul>	<ul> <li>Implement a number of training courses on policy-making</li> <li>Implement training courses on policy advocacy</li> </ul>
<ul> <li>Health officials at the lower level have not yet been trained on monitoring and evaluation of policies related to private health sector</li> </ul>	<ul> <li>Ministry of Health direct the sharing of information about private health sector management workshops, and information channels.</li> </ul>	<ul> <li>Develop and implement monitoring and evaluation of the private health sector according to technical guidelines</li> <li>Supplement resources for monitoring and evaluation of private medical practice.</li> </ul>	<ul> <li>Implement a number of workshops to share information on management of the private health sector</li> </ul>
<ul> <li>Hospital managers have not yet been trained nor accumulated the necessary skills to manage hospitals, especially in the context of implementing Decree 43.</li> </ul>	<ul> <li>Ministry of Health take the lead to train in strengthening capacity of managerial staff in implementing policies related to Decree 43, health insurance (limited to some areas of human resources, equipment, financing, and quality assurance)</li> </ul>	<ul> <li>Institutionalize regulations on training in management for managers in all public and private facilities, especially in hospitals.</li> </ul>	<ul> <li>Number of managers who have received training in health sector management, hospital management is appropriate with requirements for implementing hospital autonomy, health insurance.</li> </ul>
<ul> <li>Lower level health staff lack adequate capacity for developing plans for implementing health policies.</li> </ul>	<ul> <li>The Ministry of Health emphasizes the importance of planning for health policy implementation.</li> </ul>	<ul> <li>Expand training courses to key staff at all levels on planning for implementing health policies using local budget funds.</li> </ul>	<ul> <li>Number of meetings in which contents about the importance of planning to implement policies is discussed.</li> </ul>
<ul> <li>There is not yet a program or plan to strengthen capacity for overall policy- making in the health sector.</li> </ul>	<ul> <li>Health Strategy and Policy Institute expands the audience to which it shares information on the AusAID</li> </ul>	<ul> <li>Continue to develop projects to improve capacity for policy- making at the highest levels.</li> </ul>	<ul> <li>Number of meetings and workshops organized by the Hanoi Medical University</li> </ul>

	<ul> <li>funded project on strengthening capacity for health policy-making</li> <li>Hanoi Medical University share results attained in EVIPNET</li> </ul>		and the Health Strategy and Policy Institute to share contents of the project to strengthen capacity for health policymaking.
<ul> <li>2. Capacity of institutes, schools and individuals for research and evidence gathering for developing policies does not yet meet requirements</li> <li>Research capacity of research organizations and individual researchers remains weak (data</li> </ul>	<ul> <li>Ministry of Health organize training courses on strengthening capacity to inform about health policies, for</li> </ul>	<ul> <li>Organize training courses on advanced data analysis to more fully exploit existing data.</li> </ul>	<ul> <li>Number of training courses on strengthening capacity for policy information</li> </ul>
<ul> <li>analysis, report writing,)</li> <li>Conditions for implementing research remain limited (funds, databases, access to information)</li> </ul>	example through fact sheets, policy briefs and systematic reviews	<ul> <li>Organize Flagship courses on health reforms after adjustments to make them appropriate for Vietnam and organize them on a large scale.</li> <li>Provide solid training to officials and experts in professional areas of the health system so they can play a technical assistance role in policy-making</li> </ul>	
	<ul> <li>Develop databases on research already or currently being implemented in order to share information to strengthen resources able to implement high quality research, to supply evidence for policy-makers.</li> </ul>	<ul> <li>Consolidate the HMIS in order to provide consistent, reliable information to policy-makers.</li> <li>Develop a process to determine priorities for policy research.</li> <li>Mobilize funds to meet priorities for the sectoral research agenda.</li> </ul>	<ul> <li>Number of research establishments registered to link to the network.</li> <li>Number of databases shared.</li> </ul>

					Year		Turno of	Source of	Main
	Monitoring Indicators	Unit	Disaggregation	2009	2010	2015	Type of indicator*	informatio n*	proposer of indicator
COF									
			Overall	72.8		74	B,C,H	GSO	MOH/ HPG
1	Life expectancy	Years	Male	70.2					
			Female	75.6					
			National	2.0		1,86	В	GSO	MOH/ HPG
		Children per woman in childbearing	Red River Delta	2.1					
			Northern Midlands and Mountains	2.2					
2	Total fertility rate (TFR)		Central Coast	2.2					
		ages	Central Highlands	2.6					
			Southeast	1.7					
			Mekong River Delta	1.8					
3	Annual reduction in fertility	%	Overall	0.2		0.2	B,C,D,H		МОН
4	Population growth rate	%	Overall	1.1		0.93	B,C,H	GSO	MOH
			National	86.0		<92.0	B,C,H	GSO	MOH
			Red River Delta	19.6					
			Northern Midlands and Mountains	11.1					

					Year		Type of	Source of	Main
	Monitoring Indicators	Unit	Disaggregation	2009	2010	2015	indicator*	informatio n*	proposer of indicator
5	Population	Million	Central Coast	18.9					
		people	Central Highlands	5.1					
			Southeast	14.1					
			Mekong River Delta	17.2					
			Urban	25.5					
6	Maternal mortality ratio (MMR)	Per 100 000 live births	National	69	68	58.3	B,C,D,H	GSO	MOH/ HPG
		Per 1000 live births	National	16	15.8	14	B,C,D,H	GSO	MOH/ HPG
			Red River Delta	12.4					
			Northern Midlands and Mountains	24.5					
7	Infant mortality rate (IMR)		Central Coast	17.2					
			Central Highlands	27.3					
			Southeast	10.0					
			Mekong River Delta	13.3					
8	Under-five mortality rate (U5MR)	Per 1000 live births	National	25	25	19.3	B,C,D,H	GSO	MOH/ HPG
9	Malnutrition rate of children	%	National	18.9	17.5	15	A,B,C,H	National Institute of Nutrition	МОН
9	under age 5 (underweight)	/0	Red River Delta	17.5	14.6				
			Northern Midlands and Mountains	24.0	22.1				

					Year		Turne of	Source of	Main
	Monitoring Indicators	Unit	Disaggregation	2009	2010 2015		Type of indicator*	informatio n*	proposer of indicator
			Central Coast	20.8	19.8				
			Central Highlands	26.5	24.7				
			Southeast	14.4	10.7				
			Mekong River Delta	18.3	16.8				
			National	31.9	29.3	26	B,C,H	National Institute of Nutrition	HPG
			Red River Delta	28.1	25.5				
	Malnutrition rate of children		Northern Midlands and Mountains	34.8	33.7				
10	under age 5 (stunting)	%	Central Coast	31.9	31.4				
			Central Highlands	37.0	35.2				
			Southeast	25.9	19.2				
			Mekong River Delta	29.4	28.2				
11	Doctors per 10 000 people	Per 10 000 people	National	6.59		8	С, Н	МОН	MOH/ HPG
			National	67.7		80	B,C,H	MOH	MOH
			Red River Delta	73.2					
			Northern Midlands and Mountains	58.2					
12	Proportion of commune health stations with a doctor	%	Central Coast	65.9					
			Central Highlands	49.5					
			Southeast	78.4					
			Mekong River Delta	80.1					

					Year		Turne of	Source of	Main
	Monitoring Indicators	Unit	Disaggregation	2009	2010	2015	Type of indicator*	informatio n*	proposer of indicator
			National	95.7		>95	B,C,H	MOH	MOH
			Red River Delta	96.3					
	Proportion of commune		Northern Midlands and Mountains	94.0					
13	health stations with an obstetrics/pediatrics	%	Central Coast	96.2					
	assistant doctor or midwife		Central Highlands	95.4					
			Southeast	97.2					
			Mekong River Delta	96.1					
			National	75.8	85	90	C,H	MOH	MOH
			Red River Delta	71.8					
			Northern Midlands and Mountains	95.7					
	Proportion of village health	%	Central Coast	89.4					
14	workers with a village health		Central Highlands	97.0					
	worker		Southeast	21.9					
			Mekong River Delta	88.2					
15	Public (state budget, social health insurance and external assistance) share of total health spending	%	National			>=50		MOH/NHA	HPG
16	Proportion of the population covered by health insurance	%	National	58.20	61.5	80		МОН	МОН
17	Proportion of population facing catastrophic health spending (total out-of-pocket health spending exceeds 40% of ability to pay of the	%	National					Calculated using VHLSS data	HPG

					Year		Type of	Source of	Main proposer
	Monitoring Indicators	ng Indicators Unit Disaggregation		2009	2010	2015	indicator*	informatio n*	of
	household)								
18	Number of hospital beds per 10 000 people	Per 10 000 people	Public	20.8	20.5	23	B,C,H	МОН	MOH/ HPG
		people	Private	0.9					
			National	65.4 (2001- 2010)	80 (2001- 2010)	60 (2011- 2020)	C, H	МОН	MOH/ HPG
			Red River Delta	78.6					
	Proportion of communes		Northern Midlands and Mountains	55.4					
19	meeting commune health benchmarks	%	Central Coast	61.0					
			Central Highlands	48.1					
			Southeast	72.5					
			Mekong River Delta	72.7					
20	Tuberculosis detection rate (AFB+)	Per 100 000 people	National	52.2	52.7			MOH/NTP	MOH/ HPG
21	HIV prevalence rate	Per 100 000 people	National	187.0		<300.0	B,C,H	MOH/NTP	MOH/ HPG
22	Dengue detection rate	Per 100 000 people	National	122.0				MOH/NTP	HPG
23	Smoking prevalence	% of people aged 16 and older	National				В	МОН	HPG
24	Proportion of children under age 1 year who are fully immunized	%	National	96.3	95 (7 vac- cines)	>90 (8 vac- cines)	B,C,D,H	MOH/NTP	MOH/ HPG

Monitoring Indicators					Year	Year Type of	Type of	Source of informatio n*	Main proposer of indicator
		Unit	Disaggregation	2009	2010	2015	indicator*		
			Red River Delta	98.5					
			Northern Midlands and Mountains	94.3					
			Central Coast	95.8					
			Central Highlands	96.2					
			Southeast	95.9					
			Mekong River Delta	96.1					
25	Proportion of births in which the mother had 3 or more antenatal care visits and received full tetanus vaccination	%	National	89.2	90			MOH/NTP	MOH/ HPG
26	Proportion of deliveries assisted by skilled attendant	%	National	94.4			D	MOH/NTP	MOH/ HPG
			National	111.0		<113	B,C,H	MOH/GSO	MOH/ HPG
			Red River Delta	115.3					
			Northern Midlands and Mountains	108.5					
27	Sex ratio at birth	Boys per 100 girls	Central Coast	109.7					
			Central Highlands	105.6					
			Southeast	109.9					
			Mekong River Delta	109.9					

	Monitoring Indicators	Unit	Disaggregation	Year			Type of	Source of	Main proposer
				2009	2010	2015	indicator*	informatio n*	of
28	Proportion of medical facilities whose medical waste is treated	%	National	74.0		80	A,H	МОН	MOH/ HPG
отн	ER IMPORTANT INDICATORS	;							
29	Proportion of children born with low birth weight (< 2500 g)	%	National	5,3		NA	В	МОН	
HUN	IAN RESOURCES FOR HEALT	гн							
30	Number of university-trained pharmacists in state health care facilities per 10 000 population	Per 10 000 people	National	0.38		1.8	C,H	МОН	
	Proportion of health workers with a practice license (among those required to have a license)	24	Working in government general or specialized hospital or traditional medicine hospital	0	0	100 (2013)		МОН	
31			Working in medical appraisal or government clinic or maternity ward.	0	0	100 (2014)			
51		70	Working in diagnosis, service facility, emergency transport, commune health station	0	0	100			
			Working in private sector	0	0	100 (2012)			
HEA	HEALTH FINANCING								
32	Health spending as a share of GDP	%	National	3.6				MOH/NHA	
	Per capita total health		National	159.9				GSO	
33	spending (current prices)		Red River Delta	142.2					

		Unit	Disaggregation		Year			Source of	Main proposer
	Monitoring Indicators			2009	2010	2015	Type of indicator*	informatio n*	of
			Northern Midlands and Mountains	213.6					
			Central Coast	153.4					
			Central Highlands	184.0					
			Southeast	183.1					
			Mekong River Delta	126.4					
34	Out-of-pocket share of total health spending	%	National					MOH/NHA	
35	Spending per user of inpatient services over the past 12 months	1000 VND	National	3850				VHLSS/ GSO	
36	Spending per user of outpatient services over the past 12 months	1000 VND	National	416				VHLSS/ GSO	
PHA	RMACEUTICALS, BIOLOGICA	LS, MEDICAL E	QUIPMENT						
37	Proportion of pharmacies that meet good practice standards (GPP)	%	National	55.1		100 (2013)		МОН	
38	Proportion of blood units that have been screened for 5 infectious diseases prior to transfusion (HIV, hepatitis B and C, malaria and syphilis)	%	National			100		MOH/NTP	
	HEALTH SERVICE DELIVERY (EXAMINATION AND TREATMENT, PREVENTIVE MEDICINE, HIV/AIDS, FOOD SAFETY, POPULATION, REPRODUCTIVE HEALTH CARE, NATIONAL HEALTH TARGET PROGRAMS)								
39	Inpatient admissions per 100 people per year	Per 100 people	National					GSO/ VHLSS	

		Unit	Disaggregation		Year		Turno of	Source of informatio n*	Main proposer of indicator
	Monitoring Indicators			2009	2010	2015	Type of indicator*		
40	Number of outpatient visits per person per year	Per 100 people	National					GSO/ VHLSS	
			National		66.7			GSO	
	Proportion of people with		Poorest		74,.4				
41	inpatient or outpatient contacts who have a health	%	Near poor		60.7				
	insurance card or fee exemption card.	70	Middle		60.3				
			Better off		66.9				
			Richest		71.0				
		Days	National	6.9				МОН	
42	Average length of inpatient		Central level	10.8					
42	admission		Other sectors	11.00					
			Local (provincial, district)	6.7					
43	Tuberculosis (AFB+) cure rate	Per 100 000 people	National	90.6	90.0			MOH/NTP	
44	Malaria incidence rate	Per 100 000 people	National	70.8		<15 by 2020		MOH/NTP	
45	Leprosy prevalence rate	Per 100 000 people	National	0.04		0.2		MOH/NTP	
46	Leprosy detection rate	Per 100 000 people	National	0.41		0.3		MOH/NTP	
47	HIV incidence rate	Per 100 000 people	National	16.1			B,F	MOH/NTP	

		Unit Disaggregation		Year			Type of	Source of	Main proposer
	Monitoring Indicators		2009	2010	2015	indicator*	informatio n*	of	
48	Proportion of communes integrating community mental health into commune health station activities	%	National	63.8	70			MOH/NTP	
49	Proportion of hypertensives receiving treatment	%	National				D	MOH/NTP	
50	Proportion of diabetics receiving treatment	%	National					MOH/NTP	
51	Proportion of women aged over 40 screened for breast cancer	%	National			20		MOH/NTP	
		Victims	National	5212				MOH/NTP	
52	Food painspins	Incidents	National	152					
52	Food poisoning	Deaths	National	35					
53	Proportion of women giving birth who have had 3 or more antenatal care visits	%	National	87.6					
54	Proportion of pregnant women who have received 2 or more tetanus vaccinations	%	National	93.7					
55	Proportion of women and newborns receiving postnatal/postpartum care	%	National	89.2	95.7			MOH/NTP	
56	Contraceptive prevalence rate	%	National			100	D		
57	Proportion of households using sanitary toilet	%	National	40	50	75		MOH/NTP	

\*Notes on indicators and sources of data

National Assembly indicator assigned to the health sector
Government indicator assigned to the General Statistics Office and Ministry of Health for collection
Indicator in 5-year plan of the health sector
Millennium Development Goal
WHO recommendation
Indicator in National Health Target Program
National Strategy for the protection, care and promotion of the people's health 2011–2020 and vision to 2030
Health Partnership Group
General Statistics Office
Ministry of Health
National Target Program
Vietnam Household Living Standards Survey

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