

**Ministry of Health**

**Health Partnership Group**

# **JOINT ANNUAL HEALTH REVIEW 2013**

**Towards Universal Health Coverage**



**Hanoi, November 2013**



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## Abbreviations

ADB	Asian Development Bank
AFB+	Acid Fast Bacilli (test for Tuberculosis)
ARV	Anti-retroviral
ASEAN	Association of South East Asian Nations
CDC	Centers for Disease Control
COPD	Chronic obstructive pulmonary disease
DOTS	Directly observed treatment short course
GAVI	Global Alliance of Vaccines and Immunization
GDP	Gross domestic product
GDP	Good distribution practice
GLP	Good laboratory practice
GMP	Good manufacturing practice
GPP	Good pharmacy practice
GSO	General Statistics Office
HIV/AIDS	Human immuno-deficiency virus/ Acquired immuno-deficiency syndrome
HPG	Health Partnership Group
ICD	International Classification of Disease
IHP+	International Health Partnership
IMR	Infant mortality rate
ISO	International Standards Organization
JAHR	Joint Annual Health Review
JANS	Joint Assessment of National Strategies
MDG	Millennium Development Goal
MMR	Maternal mortality ratio
MOH	Ministry of Health
NGO	Non-governmental organization
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
PHC	Primary Health Care
PPP	Public Private Partnership
U5MR	Under-five mortality rate
UHC	Universal Health Coverage
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USD	United States Dollar
VND	Vietnam Dong (currency)
VSS	Vietnam Social Security
WHO	World Health Organization





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The Joint Annual Health Review 2013 (JAHR 2013) is the seventh annual review implemented under the direction of the Ministry of Health together with the Health Partnership Group (HPG). The JAHR 2013 report assesses progress in implementing the tasks laid out in the Five-year health plan 2011–2015, as well as results of implementing the Five-year plan targets and Millennium Development Goals (MDGs). At the same time the report contains an in-depth analysis on *“Universal health care coverage”*.

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**Editorial board**

## Introduction

### Purpose of the JAHR report

As agreed upon by the Health Partnership Group (HPG) since 2007, the Joint Annual Health Review (JAHR) has the overall objective of a situation assessment and determination of priority issues of the health sector, in order to support annual planning of the Ministry of Health, and at the same time to serve as the basis for choosing focal issues for cooperation and dialogue between the Vietnamese health sector and international partners.

Specific goals of the JAHR include the following: (i) an update on the health sector situation, including new policies, assessment of progress in implementation of tasks and achievement of health sector targets laid out in the health sector plans, and progress implementing MDGs and (ii) in-depth analysis and evaluation of one aspect of the health system, or one important topic that is the focus of policy-maker attention.

### Contents and structure of JAHR 2013

Depending on the situation in each year, the JAHR report varies the contents and structure to satisfy the goals and concrete requirements of health sector planning and choice of focal areas for cooperation and dialogue between the Vietnamese health sector and international development partners.

In 2007, the first JAHR report was compiled, providing a comprehensive update of the major building blocks of the Vietnamese health system, including the following topics: (i) health status and determinants; (ii) organization and management of the health system; (iii) human resources for health; (iv) health financing; and v) health service provision.

The 2008 and 2009 JAHR reports, in addition to the health system update section, covered the specific topics of *Health financing* and *Human resources for Health* respectively.

The 2010 JAHR report was developed during the final year of implementing the five-year health sector plan for the period 2006–2010, and the focus was placed on a comprehensive update of health system building blocks, in order to support development of the five-year health sector plan for 2011–2015.

The 2011 JAHR was developed in the first year of implementing the five-year plan for the period 2011–2015, and had the task of updating the new orientation that was decided upon in the Eleventh National Party Congress, and in the five-year socio-economic development plan, in order to promote implementation of the socio-economic plan and support development of the 2012 annual health sector plan.

The 2012 JAHR was developed in the second year of the five-year planning cycle, with the task of supporting development of the 2013 annual health sector plan, through updates on new policies and assessment of progress in implementing tasks in each of the six building blocks of the health system and in-depth analysis of medical service quality with related policy recommendations.

**The 2013 JAHR** was developed in the third year of the five-year planning cycle, with a task similar to the 2012 JAHR, but with the in-depth analysis focused on Universal health coverage (UHC), a topic that is currently receiving global attention

**PART ONE:** Update on the Situation of the Health System, has the following contents:

- Major tasks of the health sector in 2013 and health-related policies newly issued in 2012 and 2013.
- Assessment of progress implementing key tasks of the five-year plan for the period 2011–2015, covering the following contents: (i) health sector governance; (ii) human resources for health; (iii) health financing; iv) pharmaceuticals and medical equipment; (v) health information systems; (vi) primary care, preventive medicine, national health target programs, reproductive health and population-family planning services; and (vii) medical service delivery.
- Assessment of progress in implementing five-year plan targets and MDGs for Vietnam.

**PART TWO:** In-depth analysis of the topic *“Towards universal health coverage”*, including three chapters:

Chapter II: Theoretical framework and concepts related to UHC.

Chapter III: Health care service coverage.

Chapter IV: Financial protection in universal coverage.

**PART THREE** of the report consists of the **Conclusions** – a synthesis of the main findings on Vietnam’s health system and the topic of universal health coverage – and **Recommendations** – proposed solutions to priority problems for the 2014 annual health sector plan and for subsequent years.

**The Appendix** to the report includes a summary table of monitoring and evaluation indicators covering various aspects of the health system.

## Implementation methods

The process of developing the JAHR 2013 report relied on specific methodological approaches and general requirements, including the following:

- Consideration of the socio-economic context and specific attributes of the Vietnamese health system at its current stage of reform and development. Assessment of performance, progress, difficulties and shortcomings with relation to the health system goals of equity and efficiency, and specifically of the tasks that have been set out in health sector plans and strategies. Proposal of appropriate solutions.
- Identification and application of appropriate theoretical frameworks for each health system building block, and for the focal topic of the report covered in a specific year, to ensure scientific objectivity in terms of perspectives and approaches, in line with on-going modernization.
- Giving particular attention to discussions with government officials and experts in departments and administrations related to the Ministry of Health, in order to clarify where attention needs to be focused to ensure progress in implementing five-year plan tasks that have been assigned to each department and administration. Exchange of information and timely dissemination of draft reports to the Department of Planning and Finance team developing the annual health sector plan.

**Specific methods** are used to develop the report including the following: (i) compiling and synthesizing available references, including policy documents, legislation, research studies, surveys; and (ii) gathering and responding to feedback from stakeholders,

particularly experts and officials from the health sector, other ministries and agencies and international and foreign organizations.

*Compiling and synthesizing available* references includes documents of the Communist Party, National Assembly, Government, Ministry of Health and other ministries research studies and surveys; reports of ministries and sectoral agencies; specialized reviews; and materials from international and foreign agencies. The coordinators search for and regularly provide relevant references and statistical data to supplement the information sources available to national experts.

*Gathering and responding to feedback from stakeholders* is implemented as follows:

- Organization of eight roundtable discussions for brainstorming with experts (mainly domestic experts), and three workshops with the HPG.
- Posting draft chapters on the JAHR website ([www.JAHR.org.vn](http://www.JAHR.org.vn)) to get feedback from domestic and international experts.
- Requesting comments on draft chapters from departments, administrations and relevant units of the Ministry of Health and other ministries and sectors.
- Sending out drafts to get feedback from peer reviewers recruited by the JAHR (management officials and experts) during the process of drafting chapters.

## Organization of implementation

Similar to previous years, the JAHR 2013 was developed under the coordination and leadership of the Ministry of Health and the HPG. The organizational structure for running the report compilation process included the following:

*Coordinators*, consisting of representatives of the Ministry of Health (Department of Planning and Finance), one international coordinator, one national coordinator, and several support staff, who have the responsibility to resolve day-to-day issues of management and administration; organize workshops; compile feedback gathered from various sources; ensure that the process of writing the report has the participation of many stakeholders; edit; and finalize the report.

*National experts*, consist of national experts with knowledge and experience related to various components of the health system, who are tasked with drafting chapters of the report, gathering feedback from stakeholders and finalizing their chapters by taking all comments and feedback into account to the greatest extent possible.

## **PART ONE: UPDATE ON THE SITUATION OF THE HEALTH SYSTEM**

## Chapter I: Update on the situation of the health system

The JAHR consists of two main parts: i) an update on the health system situation ii) in-depth analysis of selected health system topics. Both parts are intended to assist in development of health sector plans for the subsequent year and outline the key issues in cooperation and dialogue between the Vietnamese health sector and international partners.

*Update on the health system situation* is considered to serve the main purpose of the JAHR and has received special attention from the HPG. Part One of JAHR 2013 – Update on the situation of the health system – evaluates: (i) implementation of activities and processes of the health system, including updates on new policies, progress in implementation of assigned tasks according to the six building blocks of the health system (based on the five-year health sector plan) and (ii) results of implementing health system activities measured through monitoring indicators and performance assessment.

### 1. Major tasks of the health sector in 2013

Government Resolution No. 01/NQ-CP dated 7 January 2013 on key solutions for directing implementation of the socio-economic development plan and estimating the state budget for 2013 has assigned the Ministry of Health leadership in implementing population and health care tasks in collaboration with ministries, agencies and localities. Based on Government Resolution 01, the Minister of Health in a Conference on 2012 health sector performance review and 2013 initiation of tasks, identified and presented the major tasks of the health sector in 2013 including the following:

- Strengthen health sector governance capacity. Continue to develop and complete legal documents in the 2013 health sector policy-making agenda. Implement important strategies, policies, and projects, which have already been approved.
- Focus on implementing the Prime Ministerial approved project to reduce hospital overcrowding. Continue implementation of Project 1816, and projects on satellite hospitals, family doctors, etc.
- Improve the quality of medical examination and treatment, and increase patient satisfaction. Implement Directive 05. Strengthen medical ethics, reduce procedural hassles for people using medical care services. Reduce waiting time. Minimize adverse events.
- Urgently carry out the Project on implementation of the roadmap towards universal health insurance. Revise, amend and supplement the Law on Health Insurance. Strengthen the organizational structures of the health insurance system. Reform the health insurance scheme. Develop mechanisms and policies to expand health insurance coverage.
- Implement remuneration policies for government health workers and officials. Deploy medical doctors to lower levels, particularly the grassroots level. Implement temporary secondment of medical practitioners to work at lower level medical facilities. Pilot and implement the project sending young volunteer doctors to mountainous and remote areas, with priority placed on the 62 poorest districts.
- Actively implement epidemiological surveillance to detect, promptly prevent and control major disease outbreaks, particularly outbreaks of emerging diseases, etc. Effectively implement the national target programs on health care, population-family planning, HIV/AIDS, and food safety.

- Strongly promote health environmental management activities, implement and scale up the campaign on "Promotion of hygienic practices for better public health".
- Coordinate with other ministries, agencies and localities to strictly implement mechanisms and policies on control of food hygiene and safety and environmental protection for imported goods.
- Continue to consolidate and stabilize the organization of population and family planning at the district level. Focus on reducing fertility in regions with high fertility, while maintaining reasonably low birth rates and reducing the rate of increase in sex ratio at birth. Expand antenatal screening, neonatal screening, counseling and premarital health care. Reduce the risk of population quality decline.
- Reform the operational and financial mechanisms applied in state hospitals, introduce new user fees linked with improvement in service quality, promote social mobilization, improve quality, efficiency and effectiveness of health services and strengthen performance of the health sector.
- Ensure adequate supply of essential medicines for medical treatment, stabilize drug prices. Regulate competitive tendering for procurement of drugs, drug prescription, prices, and quality. Initiate the Project on "Prioritizing use of domestically produced pharmaceuticals". Develop a decree on management of medical equipment.
- Improve the effectiveness of health information, education and communication for health-related behavioral change. Diversify information and communication methods and messages, especially in mountainous areas where many ethnic minorities live.
- Reform administrative procedures in licensing medical and pharmaceutical practice, and pharmaceutical products for distribution. Promote the application of information technology in health management. Disseminate and apply a uniform ISO process.

*Specific health policies which were promulgated in 2012 and 2013* will be presented in the relevant sections below.

## **2. Implementation of the Plan for the protection, care and promotion of the people's health for the period 2011–2015**

This section analyzes and evaluates implementation of the five-year health sector plan for the period 2011–2015 in relation to each key task laid out in the plan, including achievements, as well as difficulties and shortcomings, in order to have a basis for proposing supplementary solutions for the coming period. In addition, Section 3 assesses implementation of the targets set out in the five-year plan for the period 2011–2015 and Section 4 assesses the implementation of the MDGs.

### **2.1. Health sector governance**

#### **2.1.1. Implementation status**

##### **1) Improve capacity to develop and quality of health strategies, policies, and master plans**

###### *Implementation results*

*Developing health strategies and policies* and issuing legal documents is one of the most important functions of health sector governance. The Ministry of Health, as the focal point for the health sector, has developed draft policies and submitted them to the National



Assembly, the Government and the Prime Minister for promulgation of a number of important policies and legal documents in the past two years as listed below:

- The Tobacco Control Law;
- Decree No. 85/2012/ND-CP on the operational and financial mechanisms in state sector health service facilities;
- Prime Ministerial Decision No. 92/2013/QD-TTg approving the Project on reducing hospital overcrowding for the 2013–2020 period;
- Prime Ministerial Decision No. 317/2013/QD-TTg approving the Project on health development for islands and coastal areas by 2020;
- Prime Ministerial Decision No. 538/2013/QD-TTg approving the Project on implementation of a roadmap towards universal health insurance for the 2012–2015 period and to 2020;
- Prime Ministerial Decision No. 319/QD-TTg dated February 7 2013 approving the Project "Encouraging training and developing human resources for medical specialties including tuberculosis, leprosy, mental illness, forensic medicine and surgery for the 2013–2020 period";
- Prime Ministerial Decision No. 14/2013/QD-TTg dated 20 February 2013 on the implementation of temporary secondment of practitioners at medical facilities.

The Prime Minister issued Decision No. 122/QD-TTg dated 10 January 2013 approving the *National Strategy for the protection, care and promotion of the people's health for the period 2011–2020, with a vision to 2030*. This is a very important strategy of the health sector with its orientation for the operation of the health sector over the next 10–20 years. The Prime Minister has also approved strategies for specific sub-sectors such as HIV/AIDS (Decision No. 608/2012/QD-TTg), food safety (Decision No. 20/2012/QD-TTg) and population and reproductive health (Decision No. 2013/2011/QD-TTg). Currently, the Ministry of Health is actively developing the Master plan for improvement of the health system for 2011–2020, with a vision to 2030 in order to operationalize relevant contents outlined in the health sector strategy; this document is scheduled to be submitted to the Prime Minister for approval at the end of 2013.

On the basis of a 2012 review on implementation of health-related MDGs, the Ministry of Health is currently developing a draft "Government Resolution on acceleration of implementation of health-related MDGs by 2015"; has submitted for Politburo approval a Resolution on strengthening primary health care (PHC); and is preparing a decree on functions and human resources for commune health stations to submit to the Prime Minister in 2013.

The Ministry of Health continues to develop and refine legal documents on the implementation of the Law on Examination and Treatment, the Law on Tissue and Organ Transplantation, the Law on Health Insurance, the Law on the Elderly, the Law on People with Disabilities, the Law on Food Safety, etc. The Ministry is initiating legislation guiding implementation of the Law on Judicial Expertise and related documents and continues its work in refining legal documents in the area of professional medical procedures, the technical referral network indicating where different medical interventions should be available; assignment of responsibility for mentoring lower level facilities and referrals; diagnosis and treatment guidelines; professional certification; and quality management. The Ministry of Health is in the process of revising the Law on Health Insurance (see Chapter I, Section 2.3) and the Law on Pharmaceuticals (Chapter I, Section 2.4); and drafting a decree regulating



standards and procedures for nominating practitioners for “People’s medical practitioner” and “Distinguished medical practitioner” awards.<sup>1</sup>

*Difficulties, shortcomings*

The system of health sector legislation suffers from inconsistencies and does not yet meet the requirements for good governance. Some documents have been reformed quite slowly with prolonged development processes, thus not meeting actual needs of health sector governance. For example, the master plan for the health system has gone through several drafts since it began development in 2012 but has still not yet been approved. Several projects in the lawmaking agenda of the Ministry of Health have been delayed requiring postponement of dates of submission to the Government.

The volume of policies and policy documents required in the health sector is very large while the capacity of policymaking units of the Ministry of Health remains limited. In addition, financial resources for implementing strategies and plans are not always secured, thus impeding implementation.

**2) Consolidate, refine and stabilize the organization of the health sector from the central to local levels**

*Implementation results*

*Regarding the organizational structure at the central level*, the Government issued Decree No. 63/2012/ND-CP dated 31 August 2012 on the functions, tasks, authority and the organizational structure of the Ministry of Health. According to this decree, the Ministry of Health is authorized to perform state governance functions in health, including in the areas of: preventive medicine, medical examination and treatment, rehabilitation, medical jurisprudence, forensics, and psychiatric forensic examination, traditional medicine and pharmaceuticals, reproductive health, medical equipment, pharmaceuticals, cosmetics, food safety, health insurance, population and family planning, and management of state service providers within the jurisdiction of the Ministry.

Some noteworthy changes have occurred in the Ministry of Health organizational structure including: establishing of the Information Technology Administration and the Department of Communications and Emulation<sup>2</sup>; transforming the Department of Traditional Medicine into the Traditional Medicine Administration, and the Department of Science and Education into the Science, Technology and Education Administration; renaming the Food Safety and Hygiene Administration the Food Safety Administration; and reorganizing the Department of Legal Affairs to focus on tasks specified in Governmental Decree No. 55/2010/ND-CP dated 4 July 2011 regulating functions, tasks, authority and organization of legislative organizations.

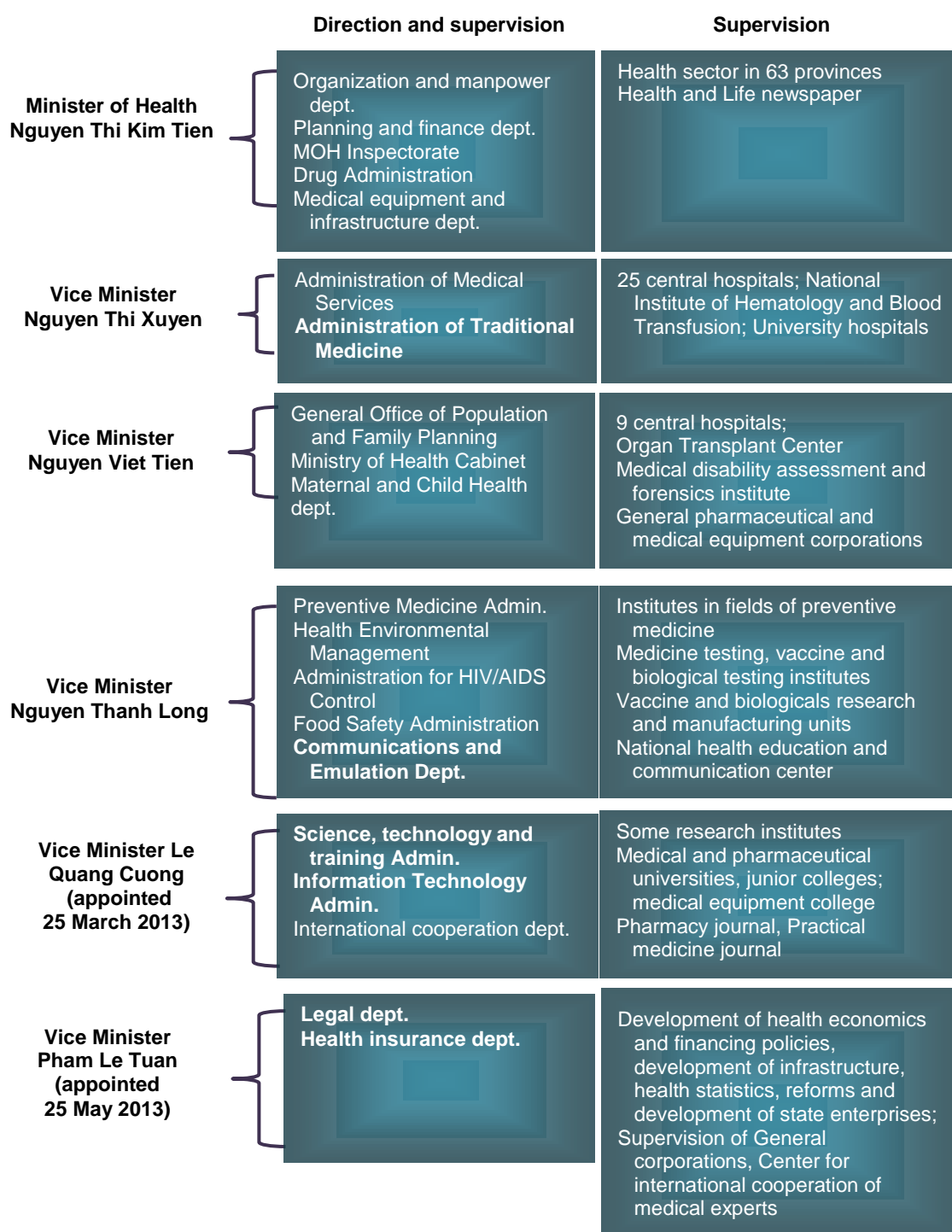
In 2013, the Prime Minister appointed Professor Le Quang Cuong, PhD and Associate Professor Pham Le Tuan, PhD to hold the positions of Vice Minister of Health. Decision No. 1518/QĐ-BYT, dated 6 May 2013 and Notice No. 537/TB-BYT dated 16 July 2013 assigned specific responsibility for different subsectors to the Minister and Vice Ministers (Figure 1). Currently, to implement Decree No. 63/2013/ND-CP the Ministry of Health is developing a list of service units directly managed by the Ministry of Health to present to the Prime Minister for approval.

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<sup>1</sup> People’s medical practitioner and Distinguished medical practitioner awards are high honors given to doctors, pharmacists, assistant doctors, traditional practitioners, producers of pharmaceuticals, medical researchers and health sector managers.

<sup>2</sup> This is also translated as socialist competition to encourage better performance between units through material and moral awards.

**Figure 1: Division of responsibility of the Minister and Vice Ministers of Health, 2013**



Source: Decision No. 1518/QĐ-BYT dated 6 May 2013; Ministry of Health Announcement No. 537/TB-BYT dated 16 July 2013.

Organization of the local health system is currently being implemented according to Decrees No. 13 and 14/2008/ND-CP, and Joint Circular No. 03/2008/TTLT-BNT-BYT dated 25 April 2008. District health centers are still directly managed by the provincial health

bureaus,<sup>3</sup> but in some districts with inadequate conditions, a single district health center implements both preventive medicine and curative care services. Commune health stations are now directly managed by district health centers. The Ministry of Health is developing a draft decree on the organization of personnel at the commune level to replace Decision No. 58/QD-TTg from 1994.

### *Difficulties and shortcomings*

The network of preventive medicine facilities at the provincial and district levels is fragmented, lacks linkages for management and provision of services.

The organizational structure and regulations on functions and tasks of medical service facilities, especially at the grassroots level are inadequate. Morbidity patterns and health care needs of people have changed over the years, however, the organization, functions and obligations of commune health stations have not been updated.

### **3) Strengthen the capacity for health system management and planning**

#### *Implementation results*

Strengthening health management and planning is one of the priority tasks of the health sector. Currently, this task is gaining increasing attention and support of development partners. The Technical Working Group (TWG) on planning and finance under the HPG was set up in 2012. The Project to strengthen capacity of the health sector funded by the European Commission has facilitated the development and application of funding frameworks in three provinces including Ha Nam, Bac Giang and Bac Ninh. The project on health system reform funded by the Rockefeller Foundation has supported development of a detailed framework for health planning and funding at the provincial level, and of assessment tools for provincial health plans, and has organized a number of training courses on health sector planning and monitoring. These activities have also received attention and support from other development partners such as World Bank, Asian Development Bank (ADB), UNICEF, UNFPA, and Global Fund for AIDS, tuberculosis and malaria prevention and control, and GAVI through projects and programs to improve health system capacity. Through training courses, health managers at the Ministry of Health and provincial health bureaus have begun to understand and apply the six building blocks of the health system recommended by the World Health Organization (WHO) and the control knobs framework for health sector reforms, and have gained access to updated information and knowledge on health financing; provider payment methods; health insurance development; pharmaceutical, medical equipment and human resources management; and medical activity monitoring and supervising.

To continue improving the quality and efficiency of health sector management and planning, the Ministry of Health is considering comprehensively reforming health sector planning through five major activities:

- *Develop an annual provincial health planning framework:* The Ministry of Health is developing an annual health planning and budget estimating framework for the provinces, as well as for the Ministry of Health, to overcome inconsistencies in how different provinces and units develop their plans and budget documents. Efforts are being made to more tightly link budget estimates with situation assessments and determination of priorities. Total fund demand, availability and shortfalls will be estimated and synthesized from different sources, and precedence given to funding for priority objectives and activities.

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<sup>3</sup> Cities directly under central government control will be included in the term province for purposes of this report.

- *Develop criteria for health plan evaluation:* On the basis of JANS evaluation criteria of IHP+, the Ministry of Health will adjust, modify, and apply these criteria for annual health plan assessment. The assessments will be done on the contents of the plan and a number of criteria will be used to evaluate each component of the plan. Agencies and localities will implement self-assessment, identify shortcomings and limitations, and thereby gradually improve the quality of health plans.
- *Strengthen the Health Ministry's health statistics capacity* to provide information and data for planning. This will be explained more clearly in the section on the health information system below.
- After completing the health planning and budget estimating framework and criteria, the Ministry of Health will *develop documents guiding health planning* and will use these as training materials, or reference materials for planning and other relevant staff.
- *Organize training courses on health management and planning:* Organize training courses, improve skills for health care activity planning and monitoring at all levels of the health system.

The above contents will continue to be implemented actively in 2013 and subsequent years.

#### *Difficulties and shortcomings*

Planning at the provincial level lacks initiative, and is constrained by many local factors.

Information and health data are still lacking and not updated in a timely fashion. Data reliability is low thus weakening evidence-informed policy formulation.

### **4) Strengthen inspections, verification and supervision**

#### *Implementation results*

The Ministry of Health has directed the implementation of the Governmental Decree regulating sanctions for administrative violations in five areas: pharmaceuticals, cosmetics and medical equipment; preventive medicine and HIV/AIDS prevention; health insurance; medical examination and treatment; and food safety. The Ministry of Health has also organized professional training courses on health inspection for the inspectors of provincial health bureaus in 63 provinces, and has guided the implementation of Decree No. 07/2012/ND-CP dated 9 February 2012 regulating agencies assigned to perform the function of professional medical inspection and stipulating operation of professional inspection.

The Ministry of Health has also placed special attention on and directed implementation of inspection and verification. Provincial health bureaus have implemented inspection and verification of private traditional medicine facilities dispensing cold/flu medicines that caused lead poisoning in children; dealt with facilities producing traditional medicines that actually contained modern medicines; undertook food safety and hygiene inspections during the Tet holiday and Mid-Autumn Moon Festival and during the Food Safety and Hygiene Month; inspected production and sales of dietary supplements; checked on school health programs; issued practice licenses and certificates of compliance with conditions to sell pharmaceuticals; issued certificates for achieving GDP and GPP standards; and inspected implementation of professional regulations and regulations on management of drug prices, etc.

Corruption fighting has been implemented through activities such as developing anti-corruption strategies for the health sector by 2020, launching the socialist emulation

campaign throughout the health sector linked with education and dissemination on the Anticorruption Law and the Law on Practicing Thrift and Combatting Waste.

### *Difficulties and shortcomings*

Medical and pharmaceutical inspection faces difficulties due to weak organizational structure and a shortage of health manpower; there are only a few health inspectors in each province; the district level does not have inspection functions. There are not yet standards and evidence-based criteria which reflect quality and efficiency of health services. Inspection is normally conducted after incidents have happened due to a lack of a preventive monitoring system.

Monitoring and evaluation of the process of implementing the Five-year plan is not yet considered a regular task of Ministry of Health departments and administrations. The bi-annual reports of departments and administrations generally lack any assessment of goal attainment or progress in implementing tasks of the Five-year plan related to the given unit.

## **5) Strengthen participation of stakeholders in the process of policy formulation, plan development and implementation**

### *Implementation results*

The Ministry of Health is striving to improve the quality of policies and legal documents it issues. To achieve this goal, in the process of developing strategies and plans in the health sector, the Ministry of Health has focused on involving participation of stakeholders, gathering evidence, assessing, and widely consulting ministries, sectors, provincial people's committees, provincial health bureaus, development partners, and the people. Draft policies and legal documents of the Ministry of Health are posted on the website of the Government to consult with stakeholders. The Ministry of Health has also organized conferences and workshops to seek feedback from ministries, sectors and experts directly and in written form.

For example, the National Strategy for the protection, care and promotion of the people's health for the period 2011–2020, with a vision to 2030 was drafted 11 times after receiving many comments of stakeholders and before being submitted to the Prime Minister Government for approval. The development partners are actively involved in providing technical support for the development of the health sector strategy through conferences, seminars and direct contribution of opinion through the WHO office, which is the focal point for development partners. The Master plan has already been drafted seven times and the Ministry of Health is proposing development partners to provide technical assistance for improvement of the content and quality of the master plan.

### *Difficulties and shortcomings*

Despite much effort, the involvement of stakeholders in the policy-making process, and in the development and implementation of health care activities is limited; some channels used for soliciting comments are ineffective due to their complicated procedures. Information published on the website of the Ministry of Health, and the electronic portal of the Government does not attract much attention from government agencies, other sectors, organizations, or the people.

The policy on reforming health sector planning has been approved and has begun to be deployed. However, the involvement of local government remains limited due to demanding regulations on planning and budget estimation. The budget of most provinces is pre-determined, especially for provinces with inadequate local revenues to balance their



budget. This makes it difficult to allocate additional resources for priority annual health objectives and activities. There are still shortcomings in the incentives for localities to reform health system planning.

**6) Promote appropriate measures of social mobilization; Encourage all economic sectors to invest in development of health services**

*Implementation results*

The financial solutions and investment section of the *National Strategy for the protection, care and promotion of the people's health for the period 2011–2020, vision to 2030* states: "...Continue to mobilize resources from society for investment in health, and appropriately adjust policies to limit *undesirable* effects of health sector social mobilization on the people ...". The Draft of the Vietnam health system Master plan to the year 2020 also mentions the policy on "...promote social *mobilization for health* and develop both public and private health sectors ..."

The Ministry of Health is collaborating with the Ministry of Finance and other relevant agencies to develop a circular guiding the implementation of Decree No. 69/2008/ND-CP dated 30 May 2008 on policies to promote social mobilization for education, vocational training, health, culture, sports, and environmental activities. The draft includes social mobilization in the areas of medical examination and treatment, and preventive medicine. However, the process of developing this circular has been difficult due to differing opinions about content including: regulations on valuation of land and medical facility trademarks, fund contribution mechanisms, and involvement of the private health sector. The Ministry of Health is striving to complete the Draft Circular to issue towards the end of 2013.

The Ministry of Health is also promoting the participation of private entities in the health sector. The Ministry of Health held a workshop on "Public-Private Partnership (PPP) in the health sector" in December 2012. Currently, there are over 30 000 private clinics, and more than 150 private hospitals with over 9600 patient beds (accounting more than 4.8 per cent of patient beds nationally and equivalent to 1.1 beds per 10 000 people). Increasing healthcare needs of the people requires major investment in the health sector. Collaboration between public and private health sectors is being implemented according to Circular No. 15/2007/TT-BYT. This collaboration is common in state hospitals in the form of mobilization of financial resources through joint ventures and business partnership involving installing medical equipment at public hospitals in profit-sharing arrangements or installing equipment with exclusive contracts for provision of necessary chemicals and materials. As a result, many high-tech services are being provided such as diagnostic imaging (MRI, CT scan, and ultrasound), lab tests, and diagnostic and intervention endoscopy, which have aided technology development in hospitals.

In addition, the role of professional associations in health sector management has begun to receive attention. The Minister of Health has issued Decision No. 5248 dated 28 December 2013 on establishing a consultative committee on issuing and re-issuing practice licenses by the Ministry of Health, involving participation of various professional associations (Vietnam Medical Association, Vietnam Standards and Consumers Association, Vietnam Association of Traditional Medicine, Vietnam Association of Midwives, Vietnam Pediatric Association,...). In the provinces, the consultative committees of the Provincial health bureaus have also been established with similar membership.

*Difficulties and shortcomings*

Incentive policies to attract investment for private health sector development are inadequate to maximize mobilization of social resources for health care. Despite the existence of some incentive policies, impediments still hinder implementation of these policies (e.g. specific provincial policies on land, taxes, etc.). Social mobilization, promoting private sector investment in state health facilities, under conditions of inadequate regulation, has led to some undesirable effects, such as lack of a clear separation between public and private sectors and increased provision of unnecessary services.

**2.1.2. Recommendations on additional solutions to fulfill the tasks assigned in the five-year plan**

**1) Improve capacity and quality of health strategies, policies, and master plans**

- Recommend the Ministry of Health, with support from development partners, review 30 years of health system reforms and propose an orientation and major solutions to continue reforms and development of Vietnam's health system in the documents of the XIIth National Party Congress and the Socio-economic development plan for the period 2016–2020.
- Complete the draft Law revising and amending Articles in the Law on Pharmaceuticals and the draft Law revising and amending articles in the Law on Health Insurance to submit to the National Assembly for promulgation; submit to the Prime Minister the revised National Drug Policy for the period to 2020, with a vision to 2030.
- Strengthen policy formulation capacity of government staff and officials responsible for policy formulation and legal document drafting in the health sector through various methods, specifically in the short-run through national and international education and training programs.
- Ensure clear identification of budget sources in plans/strategies, along with appropriate mobilization approaches, to ensure sufficient financial resources for implementation.

**2) Consolidate, complete and stabilize the organizational structure of the health sector from the central to local levels**

- Initiate a review and evaluation of the provincial health system organizational model in order to adjust the organization, functions, and tasks assigned to different units appropriate with the actual situation in the locality.
- Urgently complete development of legal documents related to organization of the health system (Health system Master plan to 2020, Development strategy for the preventive medicine network, Decree on local health organizations, etc.) towards focusing on improving the quality of medical service providers, rather than developing new facilities (with the exception being some central hospitals building secondary facilities) in order to reduce the number of intermediary units and increase investment.

**3) Strengthen the capacity for health system management and planning**

- Develop mechanisms to encourage planning and budget estimating reform across localities, including officially approved formats for health plans at different levels and

for sub-sectors, strengthened monitoring and evaluation of plan implementation, and improved financial budgeting for plan implementation.

- Pilot and scale up results-based financing initiatives for health and other financial allocation mechanisms to efficiently utilize resources.
- Improve timeliness and quality of statistical data to serve planning at all levels.
- Strengthen application of information technology for operational management including: developing electronic Government functions, reforming administrative procedures, improving capacity of the medical system, facilitating health insurance reimbursements and other activities of the health sector.

#### **4) Strengthen inspections, verification, supervision**

- Strengthen inspection, verification and supervision to monitor the implementation of health policies at central and local levels. Develop a mechanism for receiving feedback from stakeholders (e.g. policy implementation agencies in the provinces, general population and enterprises) about implementation of policies.
- Propose that the Ministry of Health assign all departments and administrations under its jurisdiction responsibility to include assessment of Five-year plan goal achievement and task implementation in bi-annual reports.

#### **5) Strengthen participation of important stakeholders in the process of policy formulation and plan development and implementation**

- Strengthen policy dialogue between policy-making agencies, policy implementing agencies, researchers and the people through conferences, workshops, seminars, forums, and on websites. Enhance evidence-informed policy formulation. Widely disseminate the findings of scientific research in order to serve the policy making process.

#### **6) Promote appropriate measures of social mobilization; Encourage all economic sectors to invest in development of health services**

- Complete formulation and promulgate the Circular on social mobilization specific to the health sector in order to guide implementation of Governmental Decree No.69/2008/ND-CP dated 30 May 2008. Develop a detailed and efficient legal framework to promote PPP in the health sector. Develop a list of areas where investment is needed from public and private partnership in the areas of investment and management of hospitals, medical equipment, management and development of pharmaceutical products, and clinical testing.
- Implement effectively Circular No. 19/2013/TT-BYT on management of quality of examination and treatment services at hospitals.



## 2.2. Human resources for health

### 2.2.1. Implementation status

#### 1) Prioritize investment in upgrading of health worker training institutions, improving quality of instruction, reforming the curriculum, training materials training methods

##### *Implementation results*

According to the health sector human resources training institution capacity assessment report in Viet Nam, all the available curricula being used in training establishments were developed based on the framework curriculum issued by the Ministry of Education and Training. These curricula have undergone amendments and updates on an almost annual basis. Most recently a four-year training curriculum on midwifery at the bachelor's degree level with a focus on competency and in line with internationally recommended standards has being developed and is expected to be approved in 2014. However, most adjustments being made are simply related to the organization of training, while updates or changes in contents and structure of the curriculum are few in number [1].

##### *Difficulties and shortcomings*

In relation to the objective of improving quality of training, so far no training quality accreditation or quality control system has been set up for medical training institutions. Improvements in training quality are not keeping up with technological development and growing need for improved quality of care in the community. According to the observations of students and former students of medical doctor and nursing specialties, the facilities in training institutions is inadequate (e.g. library, lecture halls, labs, etc.)

The curricula for training new medical workers and for continuing medical education have received inadequate attention. Feedback on the curricula indicate the need to set aside more time for skill practice sessions and place more emphasis on improving clinical skills, public health skills as well as soft skills for undergraduates. Time for clinical study only accounted for one-third of the entire curricula. The most common training method in the academy was still theoretical presentation in the classroom [1].

#### 2) Develop human resources for the health sector in terms of sufficient quantity, balanced structure and distribution. Continue to implement projects to train health workers to meet the need in rural, mountainous and disadvantaged areas

##### *Implementation results*

The quantity of human resources in the health sector continues to improve. The number of doctors and assistant doctors per 10 000 people continued to grow to reach 13.4 by 2011; the number of doctors per 10 000 people increased from 7.20 in 2010 to 7.46 in 2012 (which achieved the 2012 target in the Five-year plan); the number of university pharmacists per 10 000 people reached 1.92 in 2011 (exceeding the goal for 2015 in the Five-year plan); the number of nurses per 10 000 people also rose (to reach 10.02 in 2011) [2]. The increased quantity and quality of health workers at the grassroots level was remarkable. In 2011, as compared with 2010, manpower for health at the commune level increased by 3549 persons (of whom 346 were doctors) and at the district level increased by 6878 persons (of whom 585 were doctors). In 2012, 76.0 per cent of commune health stations had doctors, a 6 percentage point increase compared to 2010; 93.4 per cent of commune health stations had obstetrics-pediatric assistant doctors or midwives (a reduction thus not meeting the plan target). The proportion of rural villages with village health workers was maintained above 96 per cent

from 2009 to 2012, but there was a reduction in the proportion of urban blocks with a health worker to 81.2 per cent.

In order to diversify the types of training to develop human resources for grassroots healthcare facilities, the Ministry of Health issued Document No. 1915/BYT-K2DT dated 8 April 2013 guiding health sector training institutions to implement Circular No. 55/2012/TT-BGDDT dated 25 December 2012 of the Ministry of Education and Training regulating continuity between junior college and university levels. Nationally there are 7 universities currently providing training to upgrade qualifications for 1488 doctors and 24 nurses. In addition, there are 13 universities nationwide providing training of medical students who have committed to return to work in their origin localities, with 2000 students recruited in 2009, meeting 72 per cent of provincial demand for training of medical staff [1].

The Prime Minister enacted Decision No. 319/QD-TTg approving the Project on "Encouragement of training and development of health human resources specializing in tuberculosis, leprosy, mental health, forensics and pathology for the period 2013–2020" to enhance the ability to attract human resources for training, recruitment and deployment in these less attractive specialties. Policies stipulating priority salary supplements for the health sector (Decision No. 73 and Decree No. 56) will contribute to resolving part of the manpower shortage in these fields. Projects providing training to raise qualifications of grassroots health workers and recruiting students in disadvantaged localities who commit to return to work in their origin localities are currently being implemented. Project 1816 has been adjusted towards an orientation of technology transfer from higher to lower levels according to Ministry of Health Decision No. 5068/QD-BYT dated 21 December 2012.

The Ministry of Health continues to implement the policy on staff secondment. In 2013, the Prime Minister issued Decision No. 14/2013/QD-TTg regulating the temporary staff secondment for medical practitioners in health facilities to increase quality of health services at the grassroots level and disadvantaged areas. The Ministry of Health issued Decision No. 585/QD-BYT approving the Project "Piloting the sending of voluntary young doctors to remote, mountainous, island, border and especially socio-economically disadvantaged areas" with the aim of providing sufficient number and quality of doctors to enhance quality of healthcare services at the grassroots healthcare level.

To enhance human resources to meet the need for basic, comprehensive and continuous healthcare, to improve quality of primary healthcare and to contribute to mitigating hospital overcrowding, the Ministry of Health issued Decision No. 935/QD-BYT approving the Project on "Setting up and developing the family doctor clinic model". The Project: "Health development for islands and coastal areas by 2020" approved in Prime Ministerial Decision No. 317/QD-TTg dated 7 February 2013, specified the objective of developing sufficient health human resources in terms of quantity and quality to meet the need for health protection and care for the people in island and coastal areas.

#### *Difficulties and shortcomings*

Despite positive results in terms of an increased number of health workers in general, particularly for the grassroots healthcare level, in reality, the health sector still faces many difficulties in terms of human resource development. The general shortage of human resources, particularly of doctors at the grassroots level and specialists in preventive medicine, is still a problem. A recent study conducted in four provinces indicated that movement of health workers out of district and commune levels is a concern. The number of health workers retiring or moving away from district health facilities (district hospitals and health centers) was equal to about 50 per cent of the total number of new recruits, while at the

commune level departures were equivalent to about 30 per cent of new recruits [3]. Many district hospitals and health centers have not been able to recruit any doctors for many years while the migration of doctors to other localities continues. The main reason for movement of health workers away from the commune level was promotion to work at the district level.

The findings of a number of studies [3-5] also pointed out certain conditions making work at the grassroots level less attractive, particularly two main factors – low income and poor working conditions due to lack of medical equipment – found to be the main reason health workers, particularly doctors, avoid working at the district and commune levels. Research on factors attracting health workers to rural areas was implemented through discrete choice experiments. This research indicated that factors positively influencing job choice were urban location, adequate medical equipment at the workplace, high income, opportunities to develop skills (through short-term or long-term specialist training) and free housing. For doctors, workplace conditions were the most important factor; while for medical students about to graduate, opportunities for long-term training were the most important factor [4].

Effectiveness of policies related to training, attracting and retaining health workers is limited because of a number of factors including: inconsistencies between policies; lack of funding for implementation; inadequate intersectoral cooperation in selection of candidates for training; poor organization of implementation; inadequate monitoring and evaluation of results of implementing Decision No. 1544/QĐ-TTĐ on training to upgrade qualifications of existing medical staff [3].

Quality of health human resources is also a problem whose resolution needs prioritization in the coming years. The proportion of commune health workers with correct knowledge and skills for first aid, diagnosis and treatment of illnesses and knowledge for dealing with epidemics is limited according to a recent survey: (only 17.3 per cent of doctors and assistant doctors have correct knowledge and skills for first aid; 17 per cent of doctors and assistant doctors could identify risk factors during pregnancy; 50.5 per cent of health workers knew how to diagnosis hypertension; 15.6 per cent knew how to deal with an epidemic) [3]. Results from another survey also showed that commune health worker knowledge of neonatal care reached only 60 per cent of national benchmarks [6], 54.3 per cent of doctors had correct knowledge about diagnosis and treatment for dehydration due to diarrhea [7].

### **3) Develop standards of necessary skills and competencies for each type of health worker**

#### *Implementation results*

The Ministry of Health issued Circular No. 07/2013/TĐ-BYT stipulating standards, functions and tasks of village health workers and village-based ethnic minority midwives (providing mother and child healthcare). This circular included regulations on appropriate relationships between village health workers and the relevant units in the respective commune in order to overcome a shortage in human resources at the village level, especially in remote and mountainous regions. The Ministry is currently developing national competencies for midwives in Vietnam, following standards recommended in 2010 by the International Confederation for Midwives, to submit for approval in 2013. The Ministry of Health is also developing a Decree regulating remuneration, functions and tasks assigned to commune health stations by amending the outdated Decree No. 58/TĐĐ dated 3 February 1994 regulating certain issues related to organization and remuneration at grassroots healthcare facilities.

*Difficulties and shortcomings*

It is common for newly graduated doctors to lack practical skills. The medical training currently has been assessed as lacking professional practice opportunities, particularly clinical skills. According to self-assessments by recent medical graduates, only 45 per cent knew how to make an early diagnosis and provide appropriate initial treatment for communicable disease, 50.9 per cent knew how to implement some simple technical procedures, only 37.6 per cent had the ability to implement monitoring and management of chronic disease in the community [1].

**4) Effectively manage and use health human resources**

*Implementation results*

In order to ensure effectiveness of the implementation of the policies on attracting and retaining health manpower, the Ministry of Health collaborated with the Ministry of Home Affairs and Ministry of Finance to issue Joint Circular No. 02/2012/TTLT-BYT-BNV-BTC guiding the implementation of Decree No. 56/2011/ND-CP of the Government on occupation-based incentives for workers in public health facilities. The Department of Organization and Personnel of the Ministry of Health is now developing a system of statistical forms to gather information on human resources in the health sector to serve health manpower planning.

*Difficulties and shortcomings*

There is still no database system on health human resources covering training and deployment in the public and private sectors to aid in health human resources management.

The policy regulating salary supplements intended to reward and to attract health workers to disadvantaged areas according to Decision No. 64/2009/ND-CP has had positive impacts in terms of attracting and retaining health workers to work in extremely disadvantaged areas [3], but the policy's coverage was relatively modest (only 2112 communes in 62 extremely disadvantaged districts of the totals number of 11 112 communes nationwide). In addition, financial resources to pay incentives and allowances for services provided at the commune health station and for outreach activities at the commune level are insufficient, which has hindered effective implementation of human resources policies.

There is no budget line to supplement revenues for health facilities unable to balance their revenues and expenditures in order to implement Decree No. 56/2011/ND-CP stipulating salary supplements for medical personnel at state health facilities and Prime Ministerial Decision No. 73/2011/QD-TTg stipulating surgical, on-call duty and epidemic control salary supplements for health workers in state health facilities.

**2.2.2. Recommendations**

**1) Prioritize investment and upgrading of training institutions, improving quality of training, renovating curricula, documents and training methods**

- It is necessary to develop a long-term master plan for comprehensive reform of the health sector training system based on a systematic approach to ensure sustainable development of human resources for health.
- Develop a quality accreditation system and quality accreditation criteria for health worker training and a quality control system for graduates of medical training. Organize training of officials responsible for training quality control.

- Organize effective implementation of Circular No. 22/2013/BYT on continuing medical education to meet requirements for updating knowledge for health workers as specified under the Law on Medical Examination and Treatment. Priority should be given to developing plans and implementing continuing medical education to update knowledge of district and commune health workers with an orientation towards ensuring skills and knowledge needed to meet current health care needs of the population.

**2) Develop human resources for the health sector in terms of sufficient quantity, balanced structure and distribution. Continue to implement projects training health human resources for rural, mountainous and disadvantaged areas**

- Undertake an evaluation of the effectiveness of methods aimed at strengthening human resources for remote and mountainous areas and the impact of these policies on attracting and retaining human resources to serve as evidence for appropriate policy revisions.
- Strengthen training to update knowledge among existing health workers through detailed practice guidelines for health workers in extremely disadvantaged areas.
- Implement remuneration policies and create favorable conditions to attract health workers to serve disadvantaged areas, for example through salary supplements, increased salary, housing conditions, transportation assistance, conditions for improving qualifications and skills, merit awards, etc. along with the other policies.

**3) Develop standards of necessary skills and competencies for each type of health worker**

- Undertake a national review to propose necessary competencies and standards for training curricula of general practitioners, public health workers and nurses appropriate with the morbidity patterns and current need for health care of the people, to ensure that trainees, after completing their training, have effective knowledge and practical skills.
- Develop standards and performance appraisal procedures based on actual worker capacity, performance, effectiveness and productivity.
- Set up standards and standard operating procedures for human resource assessment based on actual capacity, performance, effectiveness and productivity.

**4) Effective management and use of health manpower**

- Continue to consolidate the human resources information system related to training, deployment and the relationship between training and deployment of human resources. The information system should include coverage of human resources being trained at private training facilities in order to more effectively plan for health human resources.
- Strengthen monitoring and oversight of the implementation of existing health human resources policies to improve effectiveness and make timely policy adjustments. In particular, develop an effective mechanism to ensure sufficient budget to cover incentives and allowances for local health workers at the commune health station and involved in outreach activities.



## 2.3. Health financing

Health financing is the area that has received the most attention within and beyond the health sector in 2013. The Section below presents achievements from the past year in the area of health financing in relation to the priority tasks of the health sector.

### 2.3.1. Implementation status

#### 1) Increase public spending on health through increasing state budget on health and expanding health insurance coverage

##### *Implementation results*

On 10 January 2013 the Prime Minister approved the National Strategy for the protection, care and promotion of the people's health for the period 2011–2020, with a vision to 2030 which specifies the objective of *“rapidly increasing public investment in health”*. Solutions and indicators to achieve this objective include: *“increasing annual state budget spending on health, ensuring higher rate of increase of state budget health spending than the average rate of increase of overall state budget spending. Spending at least 30 per cent of state budget health spending on preventive medicine, ensuring adequate funds for recurrent spending of commune health stations and for salary supplements for village health workers. Striving to achieve a minimum of 10 per cent of total state budget spending for health”* [8]. This shows a consistent perspective and commitment of the Government to increasing public spending on health. It also lays the foundation for the health sector to propose and defend proposals for increasing annual state budget spending for health and serves as a basic indicator for monitoring and supervising increases in public spending on health.

In 2013, the Prime Minister approved Decision No. 705/QĐ-TTg on increasing the insurance subsidy for specific groups of the near poor. As stipulated in this Decision, the state budget will subsidize 100 per cent of the health insurance contribution for the near poor who meet the following conditions: (i) members of near poor households that have recently escaped poverty, with support to last for five years from this event; (ii) members of near poor households living in the poorest districts [9].

According to our estimates based on Ministry of Finance state budget spending figures for 2012, the share of state budget recurrent spending for health reached 8.28 per cent [10]. This share remains almost unchanged compared with 8.21 per cent in 2011. Nevertheless, this represents a substantial increase over the level in 2008 at 4.92 per cent. Total state spending on health for the period 2008–2013 increased 34.2 per cent, higher than the average increase in total recurrent state spending in the same period (20 per cent) [10]. Nevertheless, the growth rate of state budget spending for health in 2012 represents a decline compared with growth rates in previous years, only 1 per cent higher than the growth rate in overall state spending.

The policy prioritizing state budget allocations for preventive medicine continues to be implemented following the target set out in the National Assembly Resolution 18/2008/QH12 “Allocate at least 30 per cent of state budget spending on health to preventive medicine”. The proportion of state budget spent on preventive medicine has increased over time. In 2009, 31.32 per cent of state budget was spent on preventive medicine [11]. State budget allocations for national health programs are implemented according to Decision No. 1222/QĐ-BTC dated 17 May 2012 which stipulated state budget allocations for ministries, sectors and localities. In 2012, the Ministry of Health was allocated a budget of 1669.39 billion VND for national health target programs, while the actual spending figure was estimated at 1728.29 billion VND, indicating spending of 101.7 per cent of the budget due to

a surplus of 28.91 billion VND carried over from 2011 [12]. Spending on National health target programs accounted for 3.2 per cent of total state recurrent spending on health.

Attention is currently being paid to the role and significance of consolidating and strengthening grassroots health care in relation to implementing PHC. In 2012, the Ministry of Health has implemented a 10-year review of implementing Directive No. 06-CT/TW dated 22 January 2002 of the Central Committee of the Communist Party on consolidating and refining the grassroots health network. The Politburo has also directed the Ministry of Health to develop a project “Consolidating grassroots health care and improving quality of medical examination and treatment”. Budget allocation norms for remote and isolated regions currently consist of a priority coefficient from 1.7 to 2.4 times higher than the norm for urban areas. According to a Ministry of Finance report, data on health services spending in 2012 for all 63 provinces indicates that the two poorest regions – the Northern midlands and mountains and the Central Highlands – have the highest state budget spending per capita of all regions in the country. The Ministry of Health is submitting to the Prime Minister a project proposal for investing in commune health care and district preventive medicine that is integrated into the National target program on building a new countryside, rural health development and programs that integrate policies of the Ministry of Health and the Committee for ethnic minority affairs (the Ministry of Health and Committee for ethnic minority affairs have signed an implementation agreement), which includes some priority policies for investment in disadvantaged, remote, isolated and ethnic minority regions [12]. The military-civilian medical cooperation program has invested in military-civilian medical facilities including upgrading clinics and adding medical equipment in 171 border area clinics in remote, isolated and priority national security areas and supported investment funds for medical equipment in five priority areas including Ly Son and Phu Quoc Islands, Gia Lai and Dak Nong provinces and Thai Nguyen province special zone (ATK).

State budget funds were allocated to subsidize insurance premiums for the poor (5757 billion VND) and children under age six (3447 billion VND). The insurance subsidy for the poor and children under age six accounted for 18 per cent of total recurrent state spending on health.

The strong rate of increase in state spending on health in recent years is attributed to government bond funds for projects to upgrade health care facilities, including the project on upgrading district hospitals according to Decision No. 47/2008/QĐ-TTg and the project on upgrading central and provincial hospitals according to Decision No. 930/QĐ-TTg. Total approved capital investment amounted to 62 280 billion VND, in which the government bond fund accounted for 46 628 billion VND. Actual total government bond funds allocated for the period 2008–2013 was only 23 200 billion VND, with 12 548 billion VND allocated for implementing Decision 47 and 10 652 billion VND for Decision 930. Total government bond fund disbursed from 2008 up through November 2012 was 21 454.2 billion VND, achieving a disbursement rate of 92.5 per cent [13].

External assistance for health has increased and been maintained at a high level even though Vietnam has become a lower middle income country [14]. In 2012, the total number of official development assistance (ODA) projects managed by the Ministry of Health was 52, with total funds of approximately 1.5 billion USD. The World Bank and Global Fund are currently the two organizations providing the largest amount of ODA funds for the health sector, accounting for more than 50 per cent of total ODA funds. Regional health support projects and HIV/AIDS control have received the most assistance from health development partners. The disbursement rate of ODA projects has been improved in recent years, but only achieved 65 per cent in 2011, and is estimated to have reached only 51 per cent in 2012 [15].

According to Ministry of Health reports, in addition to funds from ODA projects, there are 106 health projects funded by non-governmental organizations (NGOs) with a total of 256 million USD.

#### *Difficulties and shortcomings*

Macroeconomic difficulties affect the ability to increase state budget spending on health. The growth rate of state budget spending on health in the last three years has decreased remarkably due to macroeconomic difficulties and a tight fiscal policy according to Government Resolution No. 11/NQ-CP (2011) [16]. In 2012, state budget spending on health decreased dramatically compared to 2011 and 2013 estimates indicate a continued decline. In 2012, the rate of increase in state recurrent spending on health was only 1 per cent higher than the rate of increase of overall state recurrent spending, while 2013 estimates indicate that the rate of increase of state budget spending on health may be lower than the rate of increase in overall state budget spending, thus not achieving the target set forth in National Assembly Resolution No. 18 [17]. According to 2013 estimates, the share of state budget spent on health fell slightly to 8.1 per cent, quite low compared to the target of 10 per cent in the National Strategy for the protection, care and promotion of the people's health 2011–2020, vision to 2030.

## **2) Sustainably develop universal health insurance, implement the roadmap towards universal health insurance coverage**

#### *Implementation results*

Sustainable development of universal health insurance constitutes one of the key objectives of the health sector in 2012. The Politburo issued Resolution No. 21 dated 22 November 2012 on strengthening Communist Party leadership in social and health insurance activities for the period 2012–2020. The issuing of this resolution marks an important change in leadership and direction of the Party at all levels for implementation of universal health insurance coverage. The role of local authorities in ensuring effective implementation of health insurance has been emphasized. The Prime Minister issued Decision No. 538/QĐ-TTg dated 29 March 2013 approving the project on implementation of the roadmap towards universal health insurance coverage in the period 2012–2015 and 2020, with a target of health insurance enrollment for over 80 per cent of the population by 2020, and specifying solutions and sources of funds for each stage of implementation to ensure feasibility.

Refinement of the policy and legislation system for health insurance is being promoted with the main task being to revise and amend the Law on Health Insurance. Research and review to revise the Law on Health Insurance is being implemented very actively based on an independent assessment by national and international organizations and examination of international experience on content proposed for revision. The Law on Health Insurance is expected to be amended and supplemented with the following orientation:

- Refine the legal policies on health insurance to implement the following goals: expand population covered by health insurance; improve quality of medical services; reform the financing mechanism and reduce out-of-pocket spending of households; implement the roadmap towards universal health insurance coverage; implement the goal of social protection;
- Ensure harmony of rights and benefits among three stakeholders including the insured, service providers and the health insurance fund;
- Overcome inappropriate aspects of the policy identified during three years of implementing the Law on Health Insurance, specifically: scope of adjustment and

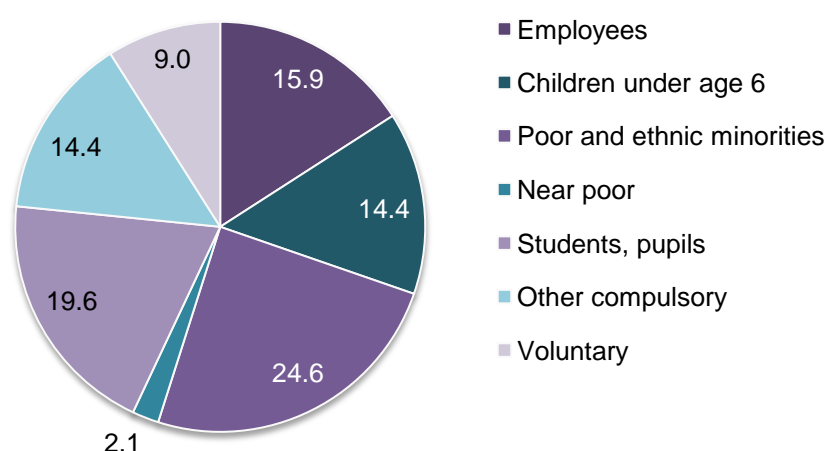


application of the Law, health insurance groups, scope of rights and health insurance benefit levels, management and use of the health insurance fund, and organization and implementation of health insurance;

- Reform existing regulations on health insurance to conform with recent changes in other related legislation.

With regard to expansion of health insurance coverage, in 2012 the number of the insured was estimated at 59.31 million, accounting for 66.8 per cent of the population [18]. Among the insured, partial or total subsidies cover at least 60 per cent, not yet including some subsidized compulsory groups like the elderly and people with disabilities for whom data cannot be separated out (Figure 2).

**Figure 2: Structure of the groups participating in health insurance, 2012**

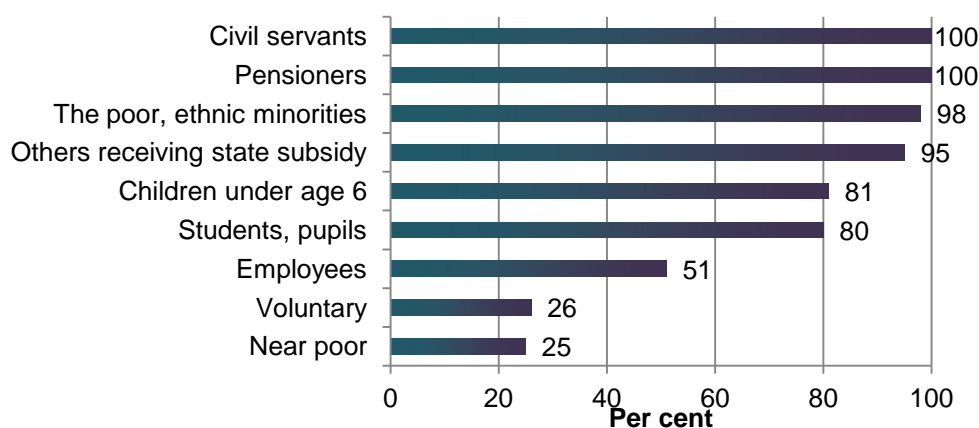


Source: Health Insurance Department, Ministry of Health, 2013

#### *Difficulties and shortcomings*

The health insurance coverage rate remains low among some target groups such as the near poor (25 per cent coverage), voluntary health insurance (26 per cent coverage) and workers in enterprises (51 per cent coverage) (Figure 3) [19].

**Figure 3: Health insurance coverage rate by insured groups, 2011**



Source: Ministry of Health, 2013. Project for implementing the roadmap for universal health insurance for the period 2012–2015 and 2020 [20].

There remain many impediments to implementing the roadmap towards universal health insurance coverage. Assessment reports on implementation of the Law on Health Insurance have pointed out limitations and shortcomings in implementation of health insurance coverage. These impediments are related to the inadequacy of some legal documents and policies, as well as shortcomings in implementation of health insurance policies. Specifically, regulations are inadequate for ensuring compliance with compulsory enrollment in health insurance, and there are not yet regulations allowing the Vietnam Social Security (VSS) to perform its role as a purchaser of health services that meet criteria of service safety, effectiveness and quality at affordable prices. Management and use of the health insurance fund remains limited in terms of sustainability and effectiveness, the provider payment mechanism is inappropriate, the management capacity of the health insurance agency does not yet meet requirements. The health insurance information system is quite limited. These shortcomings have affected three aspects of health insurance coverage including population coverage, service coverage and extent to which out-of-pocket spending on health services has declined.

Administrative procedures for buying health insurance and for health insurance reimbursements have not yet been reformed to enhance convenience for the insured while using health services.

### **3) Reform the operational and financial mechanism in state sector health service facilities**

#### *Implementation results*

After a long period of formulation and widespread consultations, Decree No. 85/2012/ND-CP on the operational and financial mechanism for state sector health service facilities and medical service prices in state medical facilities was issued on 5 October 2012. Decree 85 stipulates in great detail the operational and financial mechanism and medical service prices in state medical facilities classified into four groups based on the degree of financial autonomy of the facility. With regard to the operating mechanism, besides regulations on development of service provision plans and organization of health personnel, Decree 85 has an article regulating joint ventures and business partnership, specifically, “*capital contributions and mobilization, and joint ventures must be accounted for independently or an independent accounting unit must be set up*”. In terms of the financial mechanism, the Decree separates the financial mechanism for development investment spending from that for recurrent spending. With regard to prices of medical services, Decree 85 stipulates implementation of the roadmap towards appropriate and adequate calculation of users fee by 2018 and stipulates gradual inclusion of salary and wages in medical service prices. Obviously, Decree 85 has created a fundamental change in the operating and financial mechanisms of state health facilities. Implementation of Decree 85 will certainly promote further implementation of hospital autonomy and strengthen social mobilization for health care services.

Promulgation and implementation of Inter-Circular No. 04/2012/TTLT-BYT-BTC of the Ministry of Health and the Ministry of Finance on applying the schedule of administratively set service price caps for a large number of basic medical services in state medical facilities is another important highlight of health financing in 2012. Price adjustment for more than 500 medical services (including 80 services whose prices were set according to Circular No.03/2006) on the basis of partial cost calculation of three out of seven components of service cost has created a significant change in health financing reform in state medical facilities through appropriate and adequate calculation of service cost. Medical service prices have mainly been adjusted upwards, since only 5 out of 447 services experienced a

downward adjustment in prices. Up till now, 62 out of 63 provinces have applied new provincial medical price schedules according to Circular No. 04. The Ministry of Health, the Ministry of Finance and VSS reviewed and approved medical service prices for all 35 central hospitals. Following guidance of the Government and the Ministry of Health, Ho Chi Minh City has phased in implementation of the new medical service price schedule in order to reduce impact on the consumer price index in the same period.

With the perspective that increases in medical service prices should be linked to improvements in medical service quality, the Minister of Health issued Directive No. 05/CT-BYT on strengthening implementation of measures to improve quality of medical services after adjusting medical services prices. For people covered by health insurance, adjustment of medical service prices is expected to have a positive effect by increasing the benefits and reducing out-of-pocket spending for the insured.

### *Difficulties and shortcomings*

Implementation of the new medical service price schedule according to Circular No. 04 has led to problems with harmonization between a unified operating mechanism and decentralization. According to regulations, keeping in mind the maximum price schedule issued in the Joint Circular, the Provincial health bureaus are to collaborate with the provincial social security office and the Provincial finance bureau to formulate an option for adjusting medical service prices based on the proposal of hospitals managed by the Provincial health bureau, then to submit this proposal for the provincial price schedule to the People's Council for approval. Decentralization in medical service price setting is expected to bring positive results if the price schedule that is approved is appropriate with the specific conditions of each locality.

However, in reality the results of medical service prices approved in the localities according to Circular 04 lacks uniformity in criteria to be considered in setting prices and the actual methods for determining the prices across localities. Up till now, 62 out of 63 provinces have applied the new medical price schedule, however there are large disparities in the average service price among provinces. According to survey results of 43 provincial health bureaus, of which 41 provinces had already applied the new service price schedule, prices were set at an average of 72.2 per cent of the maximum price as regulated in Circular 04. Variation in medical service prices among provinces was quite high, ranging from 56.4 per cent to 91 per cent of the maximum allowed, with the interquartile range from 60 per cent to 82.3 per cent [21].

Vietnam is facing difficulty not only in mobilization of financial sources for health but also in using these resources effectively. Up till now there is no comprehensive research on waste in the health sector, however there is widespread acknowledgement of the existence of inappropriate use of medicines, lab tests and medical services results in increase in unnecessary health spending such as using innovator brand instead of generic medicines, overuse of drugs, overprovision of antibiotics, lab tests and diagnostic imaging, and rejection of the validity of lab test results and diagnoses across medical facilities. Fee-for-service payments are still widely used while there is not yet efficient mechanism for management of quantity and prices of medical services and medicines, which leads to an unavoidable increase in health care costs. Efficiency of investments in projects financed by the state budget subsidies, particularly projects making investments through government bond funding in recent years, has not yet been assessed adequately or comprehensively. Anecdotal evidence from some localities, particularly in mountainous areas indicates that new district hospital facilities that have received relatively comprehensive investments, have not been used efficiently because of a lack of qualified health workers, particularly doctors.

The current financial mechanism does not yet encourage efficient performance of preventive medicine facilities. Only after an epidemic occurs are funds allocated, so preventive medicine service facilities cannot be pro-active in performing epidemic prevention before an outbreak occurs. Instead these facilities make major efforts to control outbreaks when they occur, but afterwards go back to just waiting for the next outbreak. Methods for budgeting and allocating funds currently do not ensure implementation of a basic service package. Funds for professional activities in district hospitals amount to only 10–20 per cent of total state budget allocations [22]. Many commune health stations receive operating budgets that are below the legally stipulated amount (minimum of 10 million VND per year according to Joint Circular No. 119/2002/TTLT-BYT-BTC guiding revenues, expenditures and recurrent expenditures of commune health stations) [23].

#### **4) Reform health service provider payments**

##### *Implementation results*

Implementation of the provider payment reform moving away from fee-for-service towards capitation for insured patients, has led to a rapid increase in the number and proportion of medical facilities applying capitation. The roadmap for expanding use of capitation has not only met, but actually exceeded the target set out in Joint Circular No. 09/2009/TTLT-BYT-BTC. In 2010, 240 out of 1750 eligible first level facilities (where insured people register for care) were applying capitation (accounting for 13.7 per cent), including 214 out of 1190 district or equivalent level facilities (accounting for 18 per cent), exceeding by 8 percentage points compared to the target set by VSS for 2010. In 2011, 768 out of 1951 eligible facilities applied this payment method, accounting for 40.2 per cent of facilities that signed contracts to provide medical services reimbursed by the health insurance fund, exceeding by 10.2 percentage points the target set out in the roadmap in Circular 9. In 2012, capitation was applied in 42 per cent of first level facilities. The number of provinces implementing capitation has increased over time, according to VSS by 2012 only five provinces had not yet applied capitation payments.

Generally, the capitation mechanism has led hospitals to take the initiative in managing hospital finances, and strengthened accountability of various stakeholders for the management and effective use of the health insurance fund. Leaders of the Ministry of Health are actively guiding review and adjustment of guidelines for implementation of capitation payments for health insurance reimbursement of medical facilities in order to deal with various problems that have arisen. The Department of Planning and Finance under the Ministry of Health is the focal point for this review and policy adjustment. In March 2013, The Minister of Health decided to set up a drafting committee to develop a circular on capitation payments for insurance reimbursement of medical care services. A series of studies directly serving the development of this circular include an assessment survey on provider payments, calculation of medical service costs at the district and commune level, assessment of the impact of proposals for adjusting capitation payments; findings of these studies are being consulted by the drafting committee. In addition, there has been an exchange of experience with other countries that have successfully applied capitation such as Thailand and Estonia.

A case mix payment mechanism is being studied in a pilot as part of the ADB funded Health human resources development Program, involving extending case mix payments to 26 common diseases found at district and provincial hospitals. Care pathways for 24 diagnostic groups have been developed and are being assessed by hospitals and experts before finalization. At the same time, program staff are gathering clinical and financial information on components of the care pathway in order to calculate the payment levels for each

diagnosis. The Ministry of Health is discussing options and a roadmap for implementing case mix payments in Vietnam with experts from the World Bank, World Health Organization, Thailand, and the Joint Learning Network.

State budget allocation through results-based financing is being piloted in Nghe An as part of the Central North Region Health Support Project. Up till now, results-based financing has been implemented in 2 district hospitals, 2 district health centers and 4 commune health stations [24]. It is expected that the currently approved results-based financing project will improve efficiency of performance of the health services provider network. The handbook guiding implementation of the pilot results-based financing model has been approved by the Ministry of Health and World Bank, including a detailed description of the development and implementation of the project, which is a very useful document, especially for expanding this model [25].

### *Difficulties and shortcomings*

There is currently no concrete and consistent strategy and roadmap for medical service provider payment reform. A mixed set of provider payment methods is being used in Vietnam, yet they were not actually designed for congruency, to reinforce rather than undermine each other in achieving a coherent set of policy goals. Each method of provider payment has both strengths and weaknesses.

Fee-for-service payments are still widely used. Capitation payments as applied in Vietnam have many limitations and shortcomings in terms of policy design and implementation. Many problems between service providers and health insurance agencies have arisen during implementation of capitation. Deficits in capitation funds and pressures of fund management discourage many medical facilities from implementing capitation. There is a need for capitation payments to be redesigned to conform to international standards and satisfy the policy objectives. Case mix payments are gradually being implemented. However, efforts to reform provider payment methods have not yet been effectively coordinated and implemented within a comprehensive plan with a concrete and congruent strategy and roadmap. Reform of service provider payments methods needs to be implemented within the context of the health system, with mechanisms and health information systems to permit quality management and encourage continuous quality improvement.

Design and implementation of new provider payment mechanisms requires specific conditions in terms of technical capacity, ability of information system databases to meet requirements and supporting research. In Vietnam's current situation, these conditions are very limited.

### **2.3.2. Recommendations and supplementary solutions**

#### **1) Increase public spending on health through increasing state budget spending and health insurance coverage**

- Maintain the goal of ensuring that the rate of increase in state health spending for health is higher than the rate of increase in overall state budget spending.

#### **2) Develop sustainable universal health insurance coverage, implement the roadmap towards universal health insurance**

- Revise the Law on Health Insurance to remove policy impediments towards expanding health insurance coverage, ensure the rights of the insured and the responsibility of the health insurance agency as a purchasing agency.

- Strengthen capacity of the health insurance agency: consolidate the organizational structures, ensure adequate skilled manpower to implement the main function of health insurance, and strengthen information management systems.

### **3) Reform the operational and financing mechanisms in state health care facilities**

- Ministry of Health develop monitoring and evaluation indicators on implementation of reforms in the operating and financing mechanism of public sector health service facilities.
- Improve the capacity of public sector health facilities in management qualifications, including methods for costing and strengthening hospital management information systems.
- Increase efficiency of resource utilization and cost-control: implement a consistent set of measures that includes prioritization, beginning with reviewing drugs and services paid by health insurance in comparison to cost-effectiveness criteria, promoting rational use of drugs at state health facilities, overcoming the imbalance and fragmentation between different levels of the health system and between treatment and prevention at the same level of care.

### **4) Reform medical service provider payment mechanism**

- Develop a project on reforming medical service provider payments with a clear roadmap and comprehensive plan. Prioritize adjustment of the capitation mechanism at the district and commune level in the intermediate future.
- Develop patient-level databases that combine information on costs with clinical information in order to create a basis for developing and refining new provider payment mechanisms.

## **2.4. Pharmaceuticals and medical equipment**

### **2.4.1 Implementation status**

#### **1) Ensure adequate essential medicines to serve treatment needs**

##### *Implementation results*

In the past few years, the need has basically been satisfied for essential medicines and vaccines for preventive and curative care. Health facilities ensured sufficient medicines were available for each technical level of care to prevent medicine shortage at the community level.

The value of domestically produced drugs in 2012 was estimated to reach 1.2 billion USD, an increase of 5.3 per cent compared to 2011. Domestic production covers 234 out of 314 active pharmaceutical ingredients in the Viet Nam Essential Medicine List of all 29 therapeutic categories as recommended by WHO. The forum on Vietnamese people prioritizing use of Vietnamese medicines” was successfully organized to support sustainable development of the domestic pharmaceutical sector, to ensure stable supply of medicines and to reduce reliance on imports.

Besides standard licensing for the export and import of pharmaceuticals, the Drug Administration also resolved importation of rare drugs and specific drugs requested for hospitals to meet their treatment needs, drugs to supply GPP pharmacy chains and parallel



imports of medicines, thus ensuring the needs for drugs for preventive and curative care are met.

Coverage of the medicine supply network has continued to expand, with less than 2000 persons per pharmaceutical outlet. Investment in developing the medicine supply network on islands, remote and isolated areas has also received attention.

Ministry of Health Circular No. 10/2012/TT-BYT dated 8 June 2012 revised and amended some articles of Ministry of Health Circular No. 31/2011/TT-BYT on the List of drugs available for use at different medical facilities (major drug list), which expanded the scope of facilities allowed to use some drugs. The Ministry of Health is in the process of drafting and preparing to issue the list of drugs that are reimbursable by health insurance to replace the major drug list used in the past.

The Vietnamese health sector has gradually gained the capacity to supply all vaccines in the expanded program on immunization. There are six domestic facilities that produce 10 out of the 10 vaccines in the immunization program and meet 80 per cent of vaccine requirements.

### *Difficulties and shortcomings*

The share of domestically produced drugs remains low: the value of domestically produced drugs as a portion of the total value of drugs used has not increased (48 per cent in 2010 and 2011), and in 2012 actually decreased compared with 2011 (47 per cent) making it is very difficult to achieve the stated goal (60 per cent), if considerable efforts are not made.

The issuance of the 6<sup>th</sup> Viet Nam Essential Medicine List has been delayed. The generic drug policy has only begun to be implemented so impact cannot yet be assessed. Local production of antiretroviral drugs (ARV) is inadequate and there is a continued reliance on foreign aid from international agencies for these drugs. The process of reviewing selection of drugs for the health insurance reimbursement list is not yet based on cost-effectiveness criteria (see details in Chapter IV, Section 5).

Access to medicines in remote areas, islands and coastal areas remains limited due to a low number of medicine outlets, insufficient drugs available, substandard drugs or high drug prices.

There are still problems in ensuring an adequate supply of vaccines for the EPI in the face of sudden adverse events (such as suspension of the use of Quinvaxem after nine deaths and many adverse vaccine reactions), which affected the implementation of the expanded program on immunizations.

## **2) Tightly control drug prices**

### *Implementation results*

The Ministry of Health has directed the provincial health bureaus, medical facilities and pharmaceutical manufacturers to consolidate measures to stabilize drug prices. With the strong involvement of the health sector and other related sectors and agencies, many consistent measures have been implemented. As a result, the pharmaceutical market has remained generally stable, no sudden and widespread drug price increases have been observed. According to statistical data, in 2012 the pharmaceutical products price index showed an increase of 5.27 per cent, lower than the general consumer price index increase of 6.81 per cent.

Medicines supplied to public health facilities using state budget or health insurance funds were procured through competitive tendering with information made publicly available

according to the guidance of Joint circular No. 01/2012/TTLT-BYT-BTC dated 19 January 2012 and Joint Circular No. 11/2012/TT-BYT dated 28 June 2012. These regulations require that medical facilities plan their competitive tendering at least once per year, each drug category is allowed to have one bid winner that meets technical requirements, all drugs are classified into categories based on technical standards and technologies in order for hospitals to select the drug that meets specifications with the lowest bid price. The winning price for each drug cannot be higher than the price in the approved competitive tendering plan.

By the end of April 2013, 10 provinces/municipalities had completed their drug procurement through competitive tendering according to Circular No. 01 and 7 provinces were still developing their competitive tendering plan. A preliminary Ministry of Health assessment of the results indicated that procurement through competitive tendering under the new circular from the beginning of 2013 had contributed to reducing expenditures on drugs in medical facilities by 20–30 per cent. The prices of ten drugs that were procured through competitive tendering in different health facilities in 2013 compared with prices from 2012 indicated a decline in price from 5.6 to 34.6 per cent depending on the drug [26]. Results of an early survey indicate that winning bid prices for drugs in hospitals in Vietnam are lower than drugs of the same trade name, active pharmaceutical ingredient, strength and amount procured in hospitals in China and Thailand [27].

Price control ceilings are being applied on a pilot basis to wholesale markups for medicines reimbursed through the Government budget and the social health insurance fund according to Circular No. 06/2013/TT-BYT. Since 1 April 2013, nine institutions are involved in the pilot including: Bach Mai hospital, Cho Ray hospital, Hospital C in Da Nang, Bac Ninh provincial Health Bureau, Hai Phong provincial Health Bureau, Da Nang municipal Health Bureau, People's Hospital 115 in Ho Chi Minh City, Thanh Nhan hospital in Hanoi and Phu Tho General hospital. The Ministry of Health has selected 12 active pharmaceutical ingredients for the pilot, including medicines with large consumption value and large price difference between items with the same active pharmaceutical ingredient, strength and dosage form such as: Amoxicillin, Cefepime, Cefoperazone, Cefuroxime, Levofloxacin, Omeprazole, and Oxaliplatin.

VSS has also published the common price of five active pharmaceutical ingredients, including: Cefoperazone + sulbactam, Ceftriazone, Levofloxacin, Cefuroxime, and Methyl prednisolone, which are sold under approximately 300 different medicine names in Vietnam. These are widely used medicines accounting for a high share of total VSS insurance reimbursement to hospitals. The common price of these medicines was determined after reviewing hundreds of winning bids for drug procurement in hospitals. It is used as the basis for drug procurement committees to approve the winning bids in order to minimize the situation of high-priced medicines being supplied to hospitals, causing difficulties to patients as well as to the health insurance fund [27].

Inspection and checking to impose sanctions on drug price management violations have also been strengthened in accordance with Decree No. 84/2011/ND-CP dated 20 September 2011 on sanctions for administrative violations related to prices and Decree No. 93/2011/ND-CP dated 18 October 2011 on sanctions for administrative violations in the area of pharmaceuticals, cosmetics and medical devices.

Policies on generic, innovator brand medicines and bioequivalent medicines have begun to be implemented. Generic drugs are prioritized in assessing the winning bids in accordance with Circular No. 11/2012/TT-BYT. The Ministry of Health has also issued a temporary regulation on documents to be provided in order to publish lists of innovator brand drugs and bioequivalent medicines (Decisions No. 1545/QD-BYT and 2962/QD-BYT).



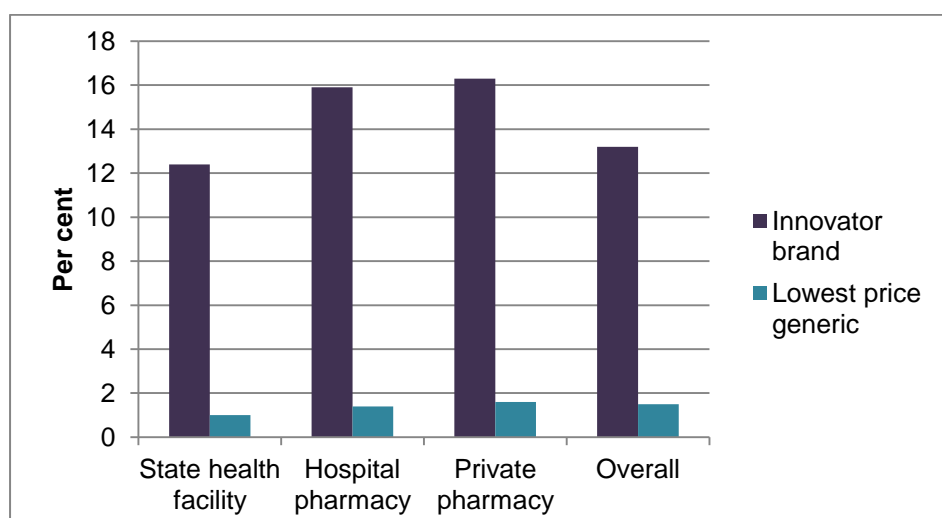
There have already been six lists of innovator brand medicines and bioequivalent drugs published in Vietnam (Decisions No. 115/QD-BYT; 344/QD-BYT; 896/QD-BYT; 1087/QD-BYT; 1546/QD-BYT; 1738/QD-BYT; 1739/QD-BYT and 3977/QD-BYT).

#### *Difficulties and shortcomings*

Tight control of medicine prices faces many difficulties. Application of Circular 01 on competitive tendering for drug procurement has exposed shortcomings such as paying inordinate attention to price criteria, lack of balance between consideration of price and quality; in the price criteria there is also concern primarily about the price of each drug type, rather than the costs of the entire treatment according to protocols, and therapeutic dosage; classification of drugs into groups by technical standards lacks clarity and could be understood and applied ambiguously.

For imported medicines, especially drugs for specific diseases and brand name drugs, it has not yet been possible to apply the wholesale markup ceilings widely. For domestically produced drugs, pharmaceutical ingredients are largely imported (90 per cent) making it difficult to be pro-active in controlling drug prices. The differential in price between brand name drugs sold in Vietnam compared to international reference prices remains high [28] (Figure 4). Results of a VSS survey of winning bid drug prices in public hospitals showed that for the same drug, same active ingredient, and same manufacturer and distributor, each hospital had a different price. The variation in the winning bid prices ranged from 20–50 percent, and for some drugs it was even higher [29].

**Figure 4: Gap in prices between brand name and generic drugs by type of pharmaceutical outlet, 2011**



Source: Report assessing implementation of the National Drug Policy 1996–2010 [28]

### **3) Strengthening management of drug quality and safe and rational use of drugs**

#### *Implementation results*

Medicine quality assurance activities continued to be implemented as planned such as implementing Circular No. 09/2010/TT-BYT guiding the medicine quality management issued by the Ministry of Health on 18 April 2010.

Implementation of the good practices standards related to manufacture, supply and distribution continues to be strengthened. The Ministry of Health also issued Circular No. 14/2012/TT-BYT dated 31 August 2012 guiding the implementation of principles and standards of “good manufacturing practices for pharmaceutical packaging”. By the end of

2011, 100 per cent of modern (non-traditional) medicine manufacturers had complied with good manufacturing practice (GMP) and 100 per cent of drug quality control laboratories had complied with good laboratory practice (GLP). By the end of 2012, more than 116 modern medicine manufacturers had complied with GMP (100 per cent), 116 of drug quality control laboratories had complied with GLP, including the National Institute for Drug Quality Control and Ho Chi Minh City Institute for Drug Quality Control and 112 laboratories of manufacturers. Some 161 units complied with GSP. Basically, pharmacies have started complying with GPP in accordance with the roadmap specified under Circular No. 43/2011/TT-BYT of the Ministry of Health. The GPP compliance rate by the end of August 2012 was 39 per cent; in addition, seven companies have been granted a certificate for GPP-compliant pharmacy chains [12].

Sampling medicines for quality testing and dealing with substandard medicine production lots have been strengthened. Decisions on recalling and withdrawing visas of substandard medicine batches have been promptly made. Inspections and sanctions for violations of medicine advertising and information regulations have been strengthened.

The National Plan of Action on Drug Resistance Control for the period 2012–2020 has been finalized and submitted to the leadership of the Ministry of Health for approval by the Vietnam Administration of Medical Services. This Plan of Action will hopefully contribute to ensuring supply of quality medicines and consolidation of rational and safe use of medicines for not only preventive and curative care, but also for use in aquaculture.

The National Center of Drug Information and Adverse Drug Reaction Monitoring is functioning well. The number of adverse drug reaction reports in 2012 increased by 34 per cent against 2011. The Center has set up a database for searching drug information, drafted and provided comments on many monographs and included them in the MEDLIB system.

#### *Difficulties and shortcomings*

Solutions on promoting rational use of medicines have not been systematically implemented so progress has been modest. Sale of medicines without prescription remains common; the consumption rate of antibiotics is very high; many of the 30 medicines most commonly used have little or no clinical efficacy.

Violations in the area of medicine information and advertising in 2012 did not decrease against 2011.

#### **4) Promote development of herbal medicine and drugs manufactured from medicinal materials**

##### *Implementation results*

The Ministry of Health continues to amend and refine policies on development of herbal medicines and drugs manufactured from medicinal materials. The Drug Administration of Viet Nam has drafted and will submit some legal documents in this field for approval, including (i) a circular on issuance of list of poisonous compounds in herbal materials used for production of medicines in Viet Nam, (ii) a project on conservation and development of precious and rare medicinal herbs; and (iii) a project for developing a master plan of medicinal material development to 2020 and vision to 2030 [27]. A Master Plan on developing medicine production and distribution, development of medicinal materials and herbal and traditional medicines.

By the end of 2012, there were more than 80 manufacturers of herbal medicines and more than 300 manufacturers of traditional medicines. Turnover obtained from local herbal

medicines has climbed sharply in the past two years (2011: by 33 per cent; 2010: by 25 per cent compared with the previous year). It was forecast that in 2012, the turnover from local herbal medicines would reach more than 3500 billion VND. The value of imported medicinal materials and herbal medicines increased seven times between 2007 and 2012 (from 8.5 million USD to 54 million USD) [27].

Directive No. 03/CT-BYT dated 24 February 2012 of the Minister of Health on consolidating management of supply and use of medicinal materials, traditional and herbal medicines in health facilities providing traditional remedies has been enforced. As reported by 44 provincial/municipal Health Bureaus, 872 wholesalers and retailers had been granted certificates of compliance with conditions for business, of which three have been granted GSP certificates for storage of herbal materials and 22 have been granted GDP certificates for wholesale sales of medicinal materials. In 2012 and 2013, the Administration of Traditional Medicine has collaborated with stakeholders to implement checking on quality of medicinal materials and traditional medicines in medical facilities, results show that about 60 per cent of samples taken do not meet quality standards.

### *Difficulties and shortcomings*

Herbal medicines only accounted for a modest portion of the total amount of medicines and total value of medicines consumed.

Management over herbal medicines and medicinal material was poor. The origin and quality of herbal medicines and medicinal materials on the market and in health facilities was not closely regulated. The recent quality testing results of the National Institute for Drug Quality Control conducted on over 400 samples of medicinal material obtained from state health facilities showed that 60 per cent of the samples failed to meet standards, of which 20 per cent was mixed with waste such as sand, cement or other impurities, fake or soaked in hazardous chemicals [30].

## **5) Promote domestic production of medical equipment and devices**

### *Implementation results*

The Ministry of Health has collaborated with the Ministry of Finance to conduct checks and study to propose solutions for a supportive tax policy for domestic medical equipment manufacturing enterprises. Training to guide the implementation of legal documents related to medical devices manufacture and trade has been organized.

The Ministry of Health has finished formulating the Circular regulating marketing authorization and Certificate of Free Sale (CFS) for locally produced medical devices.

### *Difficulties and shortcomings*

Difficulties and shortcomings, as well as solutions recommended by JAHR in the previous years, have not all been addressed or fully implemented, such as a situation analysis and needs assessment, review and updating of available equipment lists, development of a database of medical devices for all technical levels, conducting health technology assessment...

Regulatory capacity related to medical equipment (in terms of manpower, quality calibration, price control...) is limited and improved only slowly. Capacity of local medical device manufacturers is poor and information was unavailable for assessing the ability to achieve the goal of meeting 60 per cent of local equipment requirements by 2015 as set out in the targets.

## 6) Improve infrastructure of health service facilities

### *Implementation results*

Government bond-funded investments in infrastructure in 757 health facilities through Projects 47 and 930 during the period 2008–2012 included 591 district hospitals, district health centers and regional polyclinics, 51 provincial general hospitals, 46 specialized tuberculosis hospital, 33 mental health hospitals, 24 pediatric/obstetric-pediatric hospitals, 3 oncology hospitals and centers in various provinces and 10 hospitals under the Ministry of Health and Can Tho Medical and Pharmaceutical University [12]. Regarding projects under Decision 47, only a few hospitals were newly constructed, while the majority were renovated, expanded, upgraded or received new equipment. By December 2012, work on 235 district hospitals and 46 polyclinics and 30 provincial and central hospitals had been completed, and the facilities put into operation.

Medical waste treatment: As reported, by the end of 2012, 100 per cent of solid and hazardous medical waste and 94.4 per cent of medical waste water in national and regional hospitals has been treated. Some 98.6 per cent of solid and hazardous medical waste and 61.5 per cent of medical waste water discharged from various national and regional institutes/training institutions and 92.4 per cent of solid and hazardous medical waste and 66.6 per cent of medical waste water in provincial and district health facilities in all provinces have been treated [12].

### *Difficulties and shortcomings*

Funding was inadequate for investing in infrastructure and installing medical equipment in disadvantaged provincial and district health facilities.

## **2.4.2. Recommendations on additional solutions to implement and achieve the stated tasks and goals in the Five-year plan**

### **1) Ensure sufficient essential medicines for medical examination and treatment**

- Consider amending stipulations in the Law on Pharmaceuticals related to generic drug policy, essential medicines policy, ensuring medicine availability, developing the pharmaceutical distribution network and support to the people for access to drugs.
- Develop the Master plan for the development of domestic pharmaceutical manufacturing and distribution. Develop a strategy for pharmaceutical industry development to the year 2020.
- Promptly approve the 6<sup>th</sup> essential medicine list and list of medicines reimbursable by the health insurance fund to replace the major medicines list.
- Enhance production capacity for local pharmaceutical and medical equipment manufacturers to increase the domestically manufactured proportion of medicines, vaccines and medical equipment to better ensure availability of medicines, vaccines and medical equipment for preventive and curative care.

### **2) Close control over medicine price**

- Consider amending Article 5 in the Law on Pharmaceuticals related to management of drug prices towards clearer assignment of responsibility to either the Ministry of Finance or the Ministry of Health as the focal point for managing drug prices in collaboration with the Ministry of Trade and Industry and other relevant units; stipulate more concretely drug price control methods such as drug price declaration;

reduced fragmentation in competitive tendering for pharmaceuticals by province; and public posting of drug prices.

- Revise Circular No. 01/2012/TTLT-BYT-BTC dated 19 January 2012 by the Ministry of Health and Ministry of Finance on collectively organized competitive tendering for drug procurement in order to promote balance between price and quality, with a focus on the cost of the entire protocol and more specific guidance for categorization of medicines by specification.

### **3) Promote medicine quality control and rational and safe use of medicines**

- Enhance control over rational and safe use of medicines in health facilities (through the role of drug and therapy committees and promoting clinical pharmacy activities) and at the community level (monitoring of prescription drug sales, communication to improve community knowledge and awareness).
- Develop indicators for assessing rational and safe use of medicines, especially antibiotics.
- Consider revisions in regulations in the Law on Pharmaceuticals related to quality of drugs, advertisements, and drug prescription.

### **4) Promote development of herbal medicines and herbal material**

- Enhance management over origin and quality of herbal medicines and medicinal materials in all manufacturers and distributors.

### **5) Promote local production of medical equipment and devices**

- Review and assess the situation and need for medical equipment in health facilities at all levels; Update the list of essential medical equipment at different medical facilities.
- Develop a database on medical equipment to facilitate rational procurement of appropriate medical equipment in health facilities, set up a medical equipment statistics network and build a “Health Technology Assessment Unit”.
- In addition to encouraging domestic production, give priority to procurement and use of domestically produced medical equipment in policies.

### **6) Enhance infrastructure for health facilities**

- Speed up disbursement of budget funds for projects supporting development of infrastructure in provincial and district hospitals.

## **2.5. Health management information systems**

### **2.5.1. Implementation status**

#### **1) Complete the set of policies and plans for development of health information systems to the year 2015 with a vision to 2020**

##### *Implementation results*

The Health Ministry has increased attention to strengthening the organization of statistical activities to ensure implementation of functions and tasks set forth in the Law on Statistics. In 2009, the Ministry of Health set up the Health Statistics Office under the Planning and Finance Department with the functions of state management of health statistics

information and facilitating the sectoral statistical organizations and agencies to effectively serve socio-economic management and monitoring by leaders of the Party, State, Ministry of Health and localities. In 2012, the Ministry of Health issued a Decision on establishing the Department of Information Technology whose functions are advising and assisting the Minister of Health in unifying management of application and development of information technology in the health sector in general, including health statistics.

The Ministry of Health has developed Circular No. 17/2012/TT-BYT dated October 24 2012 stipulating the provision and utilization of birth certificates in order to improve the quality of information about childbirth; the Minister of Health has issued a directive on strengthening health statistics activities in order to overcome shortcomings and limitations and to meet requirements of management in the new situation. The Directive on issuing statistical registers and reporting templates that do not comply with the Law on Statistics has also been promulgated, and the Planning and Finance Department is assigned to be the only unit of contact responsible for issuing statistical reporting templates at each level of the health system.

The Ministry of Health has approved the Decision on functions, obligations and organizational structure of the Data Integration Center and Center for Health Information Technology Application [31]. Decision No. 04/QĐ-BYT dated January 2, 2013 of the Ministry of Health issues regulations on evaluation, accreditation and testing of projects on application of health information technology. Regulations on evaluation, accreditation and testing of projects with a view to support information technology application (partly or totally) in the health sector and funded by state budget and ODA, have also been promulgated.

#### *Difficulties and shortcomings*

Compared with the goal for development, the health information system remains inconsistent and is still lacking some key policies such as: (i) Plan for developing the health information system by 2020 with a vision to 2030, (ii) the policy on coordinating and sharing information among units in the health sector and between the health sector with the relevant ministries, and (iii) dissemination of information. Major causes of these shortcomings are: (i) A number of documents relating to statistical information are being amended or in the development phase, such as the Law on Statistics, regulations on statistics dissemination, (ii) new health statistics indicators are incomplete, (iii) limited and unstable investment funds and manpower for health statistics.

Some legal documents have been issued such as Circular No. 41/2011/TT-BYT guiding the issuing of practice certificates to practitioners and operational licenses to medical facilities, however they have not yet stipulated responsibility and obligation for information collection and provision. In addition, lack of funds for investment in information infrastructure and payment of health information staff has impeded implementation of policies and plans in this area.

## **2) Complete a system of health indicators, registers and health statistics reports; Issue a Decision on the health indicator system to standardize the system of basic health indicators**

#### *Implementation results \*\*\**

The Ministry of Health is reviewing and updating key health indicators for reporting to the Government [32], for achieving the MDGs, evaluating five-year plans of the health sector, and completing annual reports to international organizations, with the objective of



serving management and making of health policies in the health sector and improving the basic health indicator system [33]. The Ministry of Health is finalizing basic indicators for the health sector and health indicators for the provincial, district and commune levels. Basing on the list of basic indicators, the Ministry of Health will review and issue the original reporting templates and the reporting system for all levels. These activities will be integrated with the participation and coordination of departments, national target programs, and the development partners to create consensus and reduce the excessive number of reporting forms, especially at the grassroots level. The list of health indicators, original reporting templates system, and reporting system are scheduled to be submitted to the Ministry leaders for approval in late 2013.

Along with enhancing information collection through the periodic reporting system, the Ministry of Health has proposed a number of surveys and some of those been approved by the Government. These are favorable conditions to increase the budget for the health information system. The implementation of approved surveys not only meets the needs of information, improves data quality, but also strengthens the capacity for health workers performing statistical information tasks at the provincial and central levels.

### *Difficulties and shortcomings*

The quality of the information has not markedly improved. Some health indicators announced by the health sector are not consistent with data from other sources (e.g. the General Statistics Office (GSO)) due to inconsistencies in the reporting period, concepts, methods, etc., causing a lack of trust in general statistics and affecting data publishing. Information is not provided timely and is still incomplete; there is a shortage of information from private health facilities, and other health facilities under other ministries.

Two out of five surveys assigned by the Government for the health sector were on HIV/ AIDS and national health and were planned to be conducted in 2012. However, these approved surveys have not yet been carried out due to limited funds.

### **3) Issue official statistical reporting forms for private health facilities**

#### *Implementation results*

In the implementation of the Circular No. 41/2011/TT-BYT guiding certification for the practitioners and licensing for medical care facilities, the Ministry of Health has organized conferences and workshops on guiding issuing of medical and pharmaceutical practice certification and has granted operational licenses to over 10 000 facilities. This Circular stipulates the responsibilities of provincial health bureaus for performing statistical tasks and posting on the websites of the provincial health bureaus a list of practitioners and medical facilities that have been issued, reissued or revoked practicing certificates (licenses) or suspended professional activities at their locality.

#### *Difficulties and shortcomings*

The management of private health statistics of the Ministry of Health is still at the stage of synthesizing the number of private facilities which have been licensed up to the reporting period. Statistics on private facilities which stop operating are not collected and updated. Therefore, basic information on facilities, patient beds, personnel, etc. does not guarantee reliability. A few private hospitals have reported on medical service delivery. This is due to an absence of specific regulations on obligations and responsibilities for updating and reporting in legal documents on management of private health facilities. A system of reporting templates for these facilities has not been issued.



#### **4) Strengthen the ability to meet needs of information and data users**

##### *Implementation results*

In recent years, the health information systems has compiled a number of key statistics products including: (1) Health statistics yearbooks (2) Leaflets summarizing health statistics (3) Joint annual health reports (4) Report on implementation of the MDGs of the health sector (5) Reports on in-depth topics: Journal of Practice Medicine, Medicine and Pharmaceuticals Magazine (6) Survey results of nutrition and HIV/AIDS, (7) National health accounts, (8) Yearbook of infectious communicable diseases, (9) Data on health insurance, (10) Data on expended immunization programs, (11) Summary report on medical care activities based on annual hospital surveys, (12) data on prices of medicine posted on the website of the Drug Administration of Vietnam, etc.

Developing statistical database and national database is mentioned in the Decision on approving the overall strategy for the development and applications of information technology by the Ministry of Health for 2011–2015, which is intended to facilitate management and monitoring of the sector, and to serve the people and enterprises. Recently, the Data Integration Center of the Ministry of Health has been established and standardizing management of national database through database components such as database for medical care management, insurance database, pharmaceuticals management, etc. is being developed.

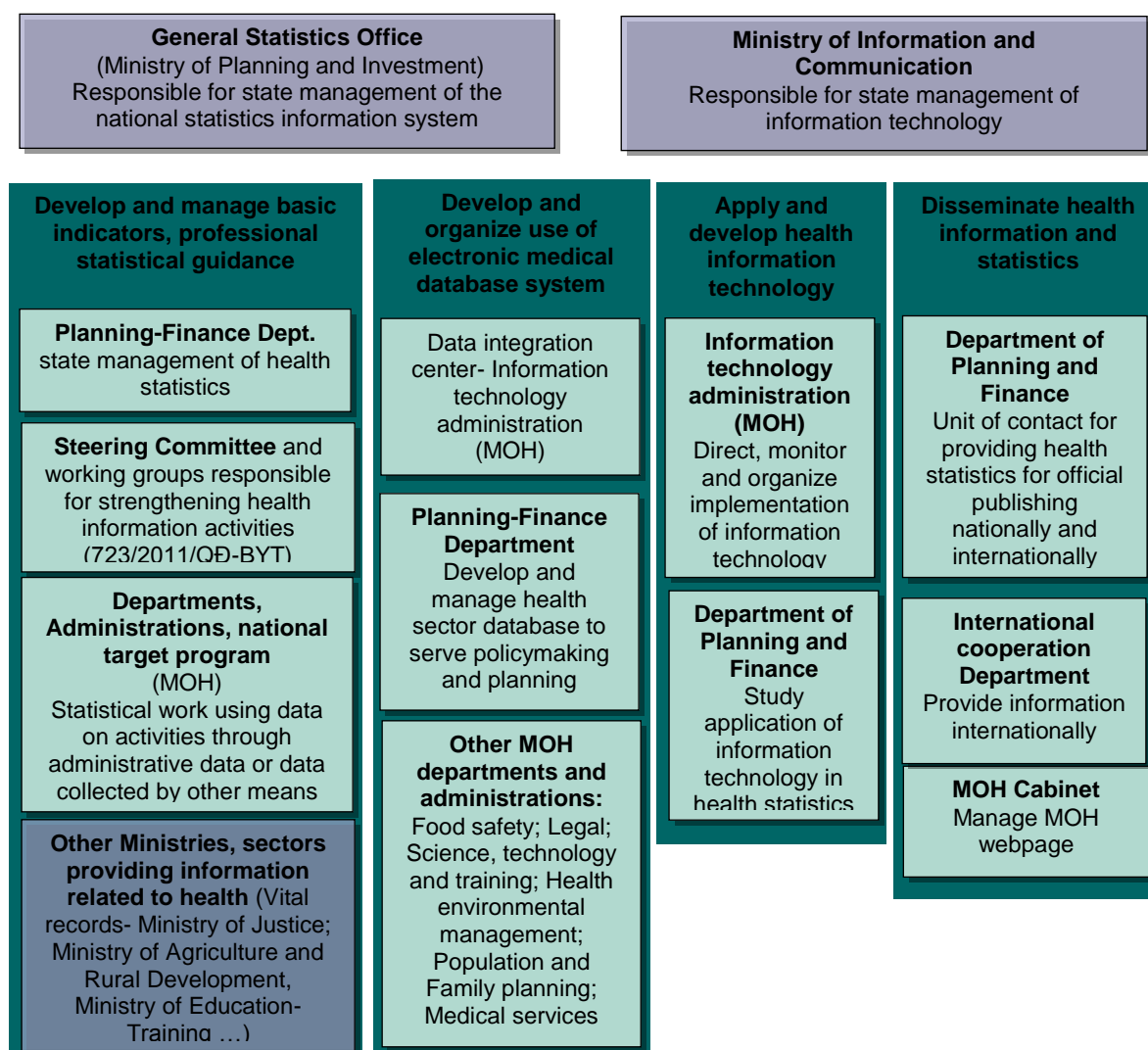
##### *Difficulties and shortcomings*

Information collection methods are inefficient and inadequate in the context of market economy. Collecting statistical information through the periodic reporting system with an excessive number of reporting forms is not justified. Currently, gathering most of the statistical indicators through periodic reports, statistical surveys and administrative registration records has been applied but on a limited scale. Collected data for synthesis according to the health statistics indicator system are incomplete. Data are not accurate or available because information is collected through a periodic reporting system. A number of equity evaluation indicators needs to be disaggregated by gender, age, ethnicity and, needs to be piloted or exploited from administrative records, however this has not yet been implemented due to a lack of funding. Health indicators are collected through surveys of the GSO but only estimated at the national and regional levels; therefore difficulties in management and planning of health services at each level are still evident.

In general, needs of information and data users are only met within the scale of sectoral departments; there is not yet a system of information connection, sharing, and clear division of responsibilities among agencies and organizations (Figure 5).

Implementation of policies on general statistical information and health statistical information is not strictly managed, there is an absence of legal enforcement and fines for facilities which do not report or report in an incomplete and inaccurate way.

Investment funding for the operation of the system is limited and not comparable with the assigned workload, therefore some activities are not done, such as surveys approved by the Prime Minister have not been conducted due to lack of funds. Active monitoring of the system has not been done regularly. Lack of funds for equipment upgrading and procurement for the system.

**Figure 5: Operating units in the health management information system**

Source: Decisions of the Minister of Health on the functions and tasks of operating units.

## 5) Improve the ability to synthesize, analyze and process data

### *Implementation results*

In 2012, with the support of the Delegation of the European Union to Vietnam, the Planning and Finance Department, Ministry of Health conducted a situation assessment of health statistics workforce and their training needs. According to the survey report of 54 provinces: 64.50 per cent of respondents confirmed a shortage and instability of health statistics workforce, approximately 80 per cent are not trained, especially health workers doing statistical tasks in hospitals (about 90 per cent). Regarding training demand, 64.7 per cent have training needs of basic knowledge of statistics, nearly 50 per cent needs training courses on synthesis and interpretation of data, 50.2 per cent on data utilization for analysis and 44.8 per cent on using data for planning. Basing on direct needs and situation of human resources, the Ministry of Health is developing and standardizing training materials for staff whose job is to deal with health statistical information. The training courses will be conducted at each level. The first course is for class instructors. The participants in this class are those responsible for synthesizing reports in 63 provinces. Participants who attend the training course fully will be certified by the Ministry of Health in 2013. These participants

will become instructors for classes at lower levels. Training courses on the use, analysis and forecasts of health statistics for staff dealing with planning and health statistical information will be organized at the central level.

Monitoring the data collection and reporting will be regularly implemented in some national target programs and in departments of the Ministry of Health.

*Difficulties and shortcomings*

Human resources of the health information system are insufficient in number, weak in professional capacity and unstable at all levels. The number of health workers concurrently responsible for statistical work is high, accounting for over 50 per cent [34].

**6) Strengthen health information dissemination through diverse and appropriate forms**

*Implementation results*

Along with strengthening the compilation of information products, improving and diversifying dissemination of information through many different forms such as printed format, distribution of publications, websites, or through mass media such as television, radio, and newspapers, providing information via CD-ROM or through press conferences and general conferences have been continued.

In general, dissemination of information has been strengthened nationally. Information is provided for the Party, the State, the managers of all levels to meet their requirements, and is also widely disseminated to the people.

The Vietnam health information system has joined global integration, provided statistics and disseminated information on the website of the WHO and several other international organizations.

*Difficulties and shortcomings*

Sharing of information in the health sector and between the health sector with the relevant ministries has not been done regularly and scientifically.

Currently, data on the Web site of the Ministry of Health is very limited compared with available information (Health Statistical Yearbook, National Health Accounts, annual hospital survey data, preventive medicine data, and data of pharmaceutical units achieving GMP). Health statistics on the website of CHITI are available up to 2009 and have not been updated. These result from an absence of policy on information dissemination which regulates agencies and units responsible for selecting and publishing at different levels.

Long delays in disseminating annual health statistics leads to difficulties in utilizing up-to-date health information for planning and monitoring purposes.

**7) Gradually modernize and apply information technology to the health information system**

*Implementation results*

The application of information technology is one of the priority issues of the health sector. Software has been applied to specialized areas such as hospital management, management of HIV/AIDS programs, tuberculosis and malaria programs, etc. The websites of the Ministry of Health, the national target programs, departments, administrations, General Office for Population and Family Planning and of localities have been gradually improved. Many information technology projects have been approved by the Ministry of Health and implemented in hospitals and national institutes.

The Ministry of Health is designing an online registration and certification system to shorten certification time boundary and reduce inconvenience to subscribers. This system is currently in the testing and completing process.

### *Difficulties and shortcomings*

Application of information technology to processing, analyzing and disseminating information is limited. So much software is applied to the same unit or agency and does not connect to each other, impeding synthesizing and analyzing information.

Database at each level of the health system is inadequate and does not include relevant data from different sources, causing difficulty in analyzing and using data.

The basic contents of websites directly managed by units and agencies under the Ministry of Health and the provincial health bureaus have neither been standardized nor regularly updated.

### **2.5.2. Recommendations on additional solutions to implement and achieve the stated tasks and goals in the Five-year plan**

#### **1) Complete the set of policies and plans for development of health information systems to the year 2015 with a vision to 2020**

- Complete the overall architecture of the health information system and the comprehensive plan for the health information system.
- Ensure sufficient funds are budgeted for investment in information infrastructure and capacity building for health information system workers.

#### **2) Complete a system of health indicators, registers and health statistics reports; Issue a Decision on the health indicator system to standardize the system of basic health indicators**

- Issue a list of basic health sector indicators, lists of basic indicators for the provincial, district and commune levels.
- Issue the statistical reporting mechanism for provinces, districts and communes.

#### **3) Issue reporting forms for private health facilities**

- Develop a circular stipulating the statistical forms, the responsibility for reporting on health facilities, health workers and health service provision of private health facilities.

#### **4) Strengthen the ability to meet needs of information and data users**

- Study and develop a system for information collection on mortality and cause of death that is integrated into the health management information system.
- Strengthen the network of non-communicable disease information collection.

#### **5) Improve the ability to synthesize, analyze and process data**

- Develop comprehensive statistical reporting software for all levels of the health system.
- Identify a research group and source of funding to implement disease burden estimates and National Health Accounts on a regular basis as part of the strategy and comprehensive plan for development of the health information system.

**6) Strengthen health information dissemination through diverse and appropriate forms**

- Develop a circular on dissemination of health sector information.
- Widely disseminate information products in different forms.

**7) Gradually modernize and apply information technology to the health information system**

- Standardize and digitalize statistical forms, apply information technology to develop the online statistical reporting system.
- Develop statistical information databases and national health databases.
- Consistently implement coding using ICD-10 and ICD-9 classifications in medical facilities.

**2.6. PHC, preventive medicine, national health target programs, reproductive health and population-family planning services**

**2.6.1. Implementation status**

**1) Consolidate and strengthen the preventive medicine system and grassroots health network**

*Achievement*

Almost all localities have all the service units implementing preventive medicine functions (See details in Chapter III, Section 2.2.1). In recent years, the health sector has focused on strengthening the health network in marine and island areas.

Through implementing the Project on controlling population in marine, island and coastal areas for the period 2009–2020 [35], up till now 169 district health-family planning teams and 19 provincial mobile teams of the Center for advising and Center for Reproductive Health have been set up [36].

In 2013, the Government issued Decision No. 317/QĐ-TTg approving the Project on health development for islands and coastal areas by 2020, with objectives of strengthening capacity of the healthcare network, developing health human resources both in quantity and quality for implementing activities such as protection and care of people's health, emergency medical care and transport in coastal and island areas, and enhancing knowledge and skills for residents in these areas to protect their own health, apply first aid, and transport patients to the nearest medical facilities. The project specifies targets such as ensuring 100 per cent of preventive medicine centers in coastal provinces and relevant sectoral medical facilities have units with adequate capacity for providing preventive and curative care services and counseling to prevent occupational disease and other common health problems of marine areas. The project provides training courses to improve knowledge about marine medicine for doctors in 70 per cent of hospitals and health centers in coastal districts and islands; ensures that 100 per cent of independent island communes have commune health stations and 50 per cent of these achieve standards set for island and coastal areas; creates conditions for 40 per cent of hospitals and island health centers to become capable of applying surgical techniques equivalent to grade II hospitals; develops 2 telemedicine models and four "115 emergency centers" appropriate for island and coastal settings along with 6 medical centers to receive and provide treatment for patients from island and coastal areas; and educates 100 per cent of workers in coastal and island areas to know how to protect their own health and call for assistance from healthcare facilities [37].

*Difficulties and shortcomings*

Preventive medicine units at the district level do not yet have a unified organizational structure and are subject to direction from too many central and provincial level units. Limitations in the efforts at investment, implementation and supervision of implementation of infrastructure investment projects, medical equipment and human resources in preventive medicine facilities and grassroots healthcare facilities has resulted in commune health stations, district health centers and provincial-level preventive medicine centers have received insufficient investments and faced difficulties in achieving targets on national standards (national benchmarks for commune health, provincial preventive medicine center standards, etc.) [38]. This has led to limitations in the ability of grassroots health units to provide services in both required volumes and quality.

**2) Strengthen preventive medicine and effectively implement the projects of the national health target programs**

*Implementation results*

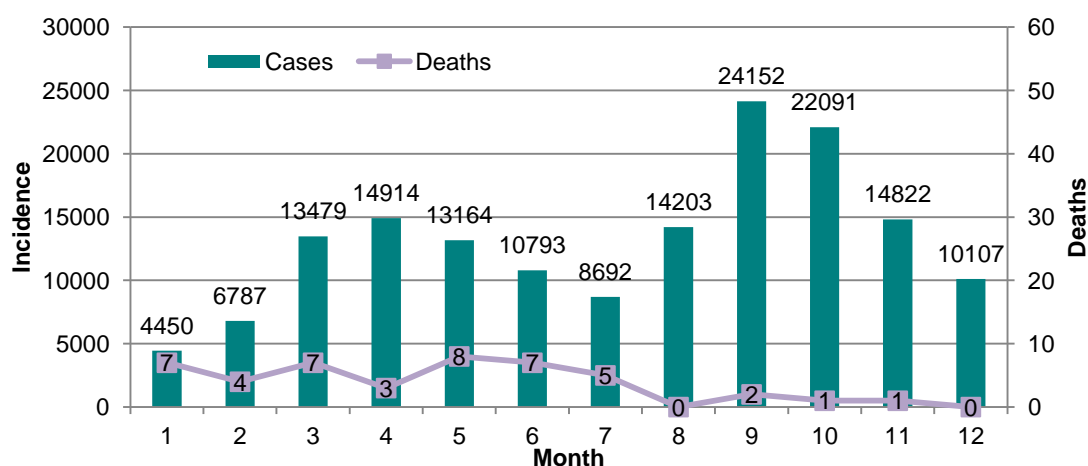
*Implementation of communicable disease prevention activities*

*Communicable disease prevention projects:* The health sector has achieved remarkable results in disease control through implementing the National strategy for development of preventive medicine to 2020 [39], the National strategy for HIV/AIDS control up to 2020 with a vision to 2030 [40], the Plan for protection, care and promotion of people's health in the period 2011–2015, strategies for prevention of some dangerous communicable diseases such as malaria [41], and the national health target program for the period 2012–2015 according to Prime Ministerial Decision No. 1208/QĐ-TTg issued in 2012 [42]. The health sector has maintained effective control over dangerous infectious diseases covered in Project 1 and the expanded program on immunization covered in Project 2 of the National health target programs for the period 2012–2015. No cases of cholera or plague have been reported; incidence and deaths due to rubella, malaria, rabies, and *streptococcus suis* in humans have been reduced and no epidemic outbreaks have occurred; typhoid fever, viral encephalitis, meningitis, and anthrax have been effectively controlled with fewer cases than in previous years. Some newly emerging diseases such as inflammatory palmoplantar hyperkeratosis syndrome in Ba To district, Quang Ngai province have been quickly controlled, preventing infection spreading within the community.

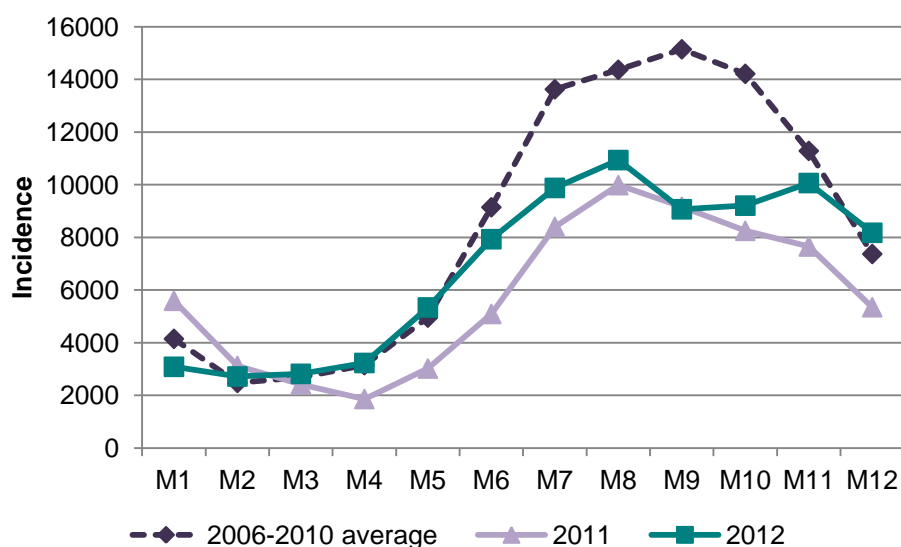
The health sector has continued to maintain achievements of eradicating polio and neonatal tetanus; and reduced incidence of diseases preventable through vaccination in the national expanded immunization program (including tuberculosis, diphtheria, pertussis, tetanus, polio, hepatitis B and measles); implemented the expanded program on immunization to achieve immunization rates of over 90 per cent (including immunization of children under one year of age), and limiting side effects from immunizations. The health sector has also collaborated with the Ministry of Agriculture and Rural Development to control influenza A (H5N1) and influenza A (H1N1) and avoid outbreaks; and effectively operated the border quarantine system (health quarantine, animal quarantine).

The Preventive Medicine Administration assesses performance on 39 indicators covering various areas like epidemic control, border quarantine, vaccine and biological management and biosafety. For the group of indicators on epidemic control, only 88 per cent of targets were achieved, with underachievement in 2012 in the areas of control of hand-foot-mouth disease (Figure 6) and dengue fever (Figure 7), which both had high incidence and prevalence over a wide area [43].



**Figure 6: Morbidity and mortality from hand, foot and mouth disease, 2012**


Source: Vietnam Administration of Preventive Medicine

**Figure 7: Dengue fever morbidity, 2012**


Source: Vietnam Administration of Preventive Medicine

The National tuberculosis control program has achieved many positive results in controlling tuberculosis in Vietnam according to the plans. Notably, tuberculosis prevalence has fallen to 225/100 000 in 2011, compared to 375/100 000 people in 2000. Each year the program detects about 100 000 tuberculosis patients and successfully treats over 90 per cent of these cases; the tuberculosis detection rate (AFB+) per 100 000 population has declined by 1.7 percentage points per year and the number of all types of tuberculosis patients has fallen by 0.8 percentage points per year.

The national tuberculosis control program covers 100 per cent of the nation's territory; detection activities have improved through a focus on diagnosing AFB+ pulmonary tuberculosis through direct sputum examination and implementing diagnosis of pediatric tuberculosis. The program applies an 8 month DOTS (directly observed treatment short course) approach with the first protocol for newly detected tuberculosis patients with a cure rate of 91.2 per cent for AFB+ patients, and the second protocol for recurrences and treatment failure, achieving an 80 per cent treatment success rate.

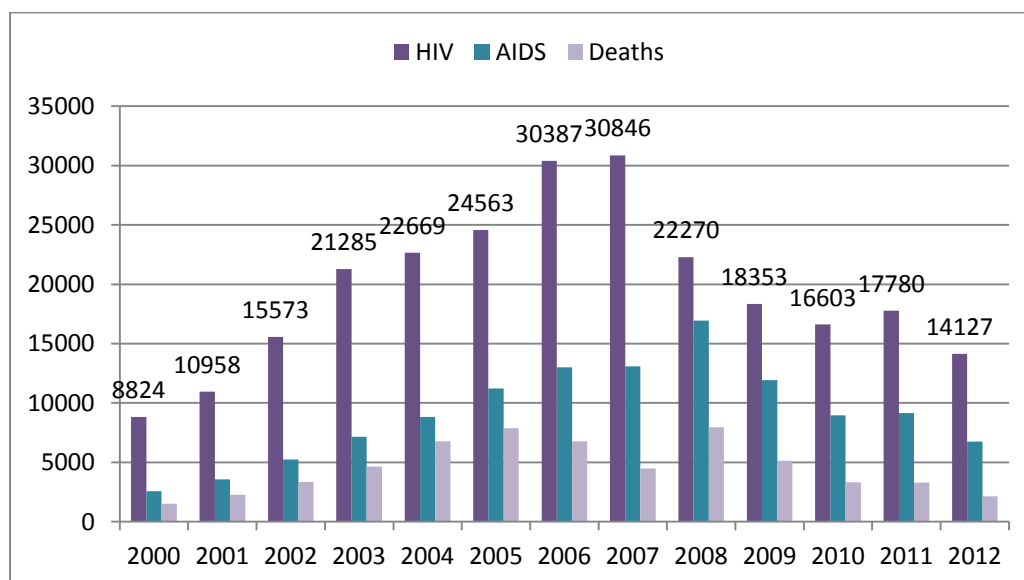


*The HIV/AIDS control program:* The HIV/AIDS control program has reduced the incidence and deaths from HIV/AIDS starting in 2008 (Figure 8). In 2012, 14 127 new HIV cases were detected, 6734 new AIDS cases and 2149 deaths due to AIDS.

*ARV treatment:* By 30 September 2012, 69 882 people nationwide were benefitting from ARV treatment, of whom 66 167 were adults and 3715 were children. Just 10 provinces account for 48 367 cases, accounting for 69.21 per cent of all cases receiving treatment nationwide).

Support for HIV/AIDS treatment and preventing mother-to-child HIV transmission was provided to some 94 000 mothers and treatment of addiction through methadone replacement therapy is being provided in 14 provinces (exceeding the targets for 2013) for some 11 000 people in accordance with Decree No. 96/2012/ND-CP dated 15 November 2012 stipulating treatment of addiction through methadone replacement therapy.

**Figure 8: HIV/AIDS morbidity and mortality, 2000–2012**



Source: Vietnam Administration of HIV/AIDS Control [44, 45]

*Risk reduction interventions:* the free condom distribution programs have been implemented in all 63 provinces and the needle exchange program has been implemented in 88 per cent of provinces.

*HIV voluntary counseling and testing* has been expanded to 485 counseling units in 63 provinces, with 84 HIV testing labs officially allowed to confirm HIV diagnosis in 54 provinces. In total, around 2 million people have been provided with HIV related counseling and free HIV testing.

*Prevention of HIV transmission from mother to child* is being implemented nationwide with the new orientation for interventions in prevention of HIV transmission from mother to child as follows: (i) early HIV counseling and testing for pregnant women, (ii) providing ARV treatment for pregnant women from the 14th week of pregnancy (instead of the 28th week of pregnancy previously). Currently there are 226 service delivery points providing services for the prevention of HIV transmission from mother to child, two at the central level, 92 at the provincial level and 132 at the district level, accounting for about 25

per cent of all districts in the country. By the end of 2012, 1 025 852 pregnant women had been tested for HIV (accounting for 42 per cent of pregnant women nationwide). Among all pregnant women coming for voluntary counseling and testing, 1684 were detected to be HIV positive. Some 872 children were born to women infected with HIV, and among these 613 children were given prophylactic Cotrimoxazole treatment for the first 2 months after birth (70.3 per cent).

*Results of implementing the non-communicable disease prevention programs*

*The hypertension control program*, although it has only been implemented for 2 years and is not yet scaled up nationwide, has nevertheless exceeded its targets for communication for prevention and control of hypertension and effective supervision of the project from the central to provincial levels. The project has provided training of 510 central level and 18 686 provincial or district level health workers. Some 41 984 hypertensive patients are being managed (58.3 per cent against the target of 50 per cent) out of the 71 972 patients screened since 2010, with blood pressure of 17 613 of these patients controlled to the target levels [46].

*The diabetes control program* is being implemented nationwide. The organizational network has been established from the national to the commune health station level and focal points linking the provincial to the district levels have been set up. Community-based screening and pre-diabetes and diabetes surveillance has primarily been undertaken effectively since 2010. Screening has been implemented in 1983 communes (18.5 per cent of all communes in the country) for a total of 1 443 438 people (1.6 per cent of the population) of whom 668 476 have received blood glucose testing. Nevertheless, the planned targets have not yet been achieved (including behavior change of target groups, pre-diabetes and diabetes screening and management) [47].

*Blindness control program*: In 2009 the Ministry of Health issued Decision No. 4322/QĐ-BYT on the National Plan for Blindness Control in the period 2009–2013. One of the key objectives of the Plan is to control preventable diseases that may cause blindness such as cataracts, trachoma, vitamin A deficiency related xerophthalmia, refractive problem with specific targets such as cataract surgery at a minimum rate of 2000 cases per million people by 2013, entropion surgery at 30 000–40 000 per year and eradication of severe entropion by the end of 2014, vision screening and provision of eyeglasses for pupils (ages 6–15) starting with a pilot in 20 provinces that previously had international assistance, then scaling up nationwide. The results up to 2012 show that performance on these targets has been inadequate, with cataract surgery performed on only 1764 cases per year, only 10 000 entropion operations each year (in 2011), with the backlog of entropion cases estimated at more than 200 000 cases [48].

*Chronic obstructive pulmonary disease (COPD) and asthma prevention programs*: Decision No. 595/QĐ-BYT dated 2 March 2011 approved the activity plan for 2011 of the COPD prevention programs. It has been implemented with the following objectives and targets: (i) improving the quality of diagnosis, treatment, prevention of COPD at each level; (ii) raising awareness of people about COPD and risk factors; (iii) developing policies and network for management of COPD nationwide. The main activities implemented include developing a network of project management units at all levels, training program staff at all levels, implementing screening for asthma and COPD at health facilities, developing diagnosis and treatment protocols and implementing IEC activities. By 2012, the program had only been implemented in 10 provinces from Nghe An on north including establishment of project management units in these 10 provinces; all other goals have not yet been achieved for 2012. The planned target for 2012 included: screening to detect 4000 cases, so far only 3575 cases have been detected through screening of 48 395 individuals. The project has

organized 92 skills training courses for 5106 health worker trainees who participated in the program. Implementation of the program faced difficulties and was ineffective due to delays in funding (normally not received till the third quarter of each year), ineffective screening program, high cost for screening drugs, delayed procurement of equipment, and limited advising activities provided by the central project management unit for lower levels [49].

*National food safety program:* Some 61 out of 63 provinces have issued action plans to implement the National strategy for food safety for the period 2011–2020 with a vision to 2030 in accordance with Prime Ministerial Decision No. 20/2012/QĐ-TTg. Up till now, food safety management regulations have basically been completed, creating an adequately strong legal basis for food safety regulation in Vietnam. In 2012, additional national technical standards and regulations were developed, including 50 national technical regulations on food safety. Some 25 food safety laboratories have met ISO/IEC 17025:2005 standards, and the goal has been set for 80 per cent of food safety labs to meet these standards by 2020. An Inter-sectoral Food Safety Steering Committee has been set up at 3 levels: Provincial (100 per cent), district and commune levels (over 99 per cent of districts and communes). International proficiency testing programs for central, regional and provincial laboratories have been organized. The certification system was developed for implementation by the Center for Food Safety Application and the National Institute for Food Control. Mass food poisoning was reduced and the number of poisoning cases was better controlled than in previous year [50].

*Health environmental management and occupational health:* The communication plan for the National Target Program for rural water supply and sanitation for the period 2012–2015 and communication activities for the Patriotic sanitation campaign to promote the people's health are being implemented. The Ministry of health is directing the implementation of the Master project on treatment of medical waste for the period 2011–2015 with an orientation to 2020 according to Prime Ministerial Decision No. 2038/QĐ-TTg dated 15 November 2011; the plan for the National Program on labor safety and hygiene for the period 2011–2015; surveys and statistical reports on accidents and injuries; the Project on control of occupational disease and healthcare of workers; the Plan for management of chemicals, insecticides, disinfectants used for household and health facilities in the period 2012–2015; issuing of permits for transport of these dangerous goods by roads (Circular No. 08/2012/TT-BYT). The Ministry of Health is developing a circular to guide the checking and monitoring of the quality of drinking and household water; a circular regulating the monitoring of environmental impact from hospital activities; a Project investing in building medical waste treatment systems for state health facilities in order to implement Decision No. 2038/QĐ-TTg dated 15 November 2011, and the draft Project on rural sanitation in the National target program on rural water supply and sanitation for the period 2012–2015.

In 2012, the Health Environmental Management Administration has focused on fully resolving environmental pollution at facilities that cause severe environmental pollution affecting the community's health. By the end of December 2012, 49 out of 84 facilities (58.3 per cent of the total) were certified to have resolved environmental pollution problems, 23 out of 84 facilities (27.4 per cent of the total) are implementing procedures to receive their certification for resolving environmental pollution, and 12 facilities (accounting for 14.3 per cent) are preparing investments in construction of medical waste treatment facilities [12].

*School health:* Currently there exists a clear legal basis for division of responsibility and strengthening school health work, this is Directive No. 23/2006/CT-TTg dated 12 July 2006 on strengthening health activities in schools; Joint Circular No. 03/2000/TTLT-BYT-BGDDT assigning responsibility and regulating the functions and tasks of each agency and

unit of the health system, education system and an inter-sectoral coordination mechanism for school health; Decision No. 73/2007/QĐ-BGDDT with concrete stipulations on contents, conditions to ensure and assign responsibility for school health activities; Joint Circular No. 35/2006/TTLT-BGDDT-BNV on staffing in state sector general education facilities, which includes norms for school health worker; Circular No. 46/2010/TT-BYT on national technical standards for hygiene and prevention of infection at education facilities belonging to the national education system.

*Other health promotion interventions:* In 2012 the Ministry of Health submitted the draft and the National Assembly approved the Law on Tobacco Control [51], which came into effect on 1 May 2013. Currently the Ministry of Health is drafting sublegal documents including a draft decree on implementation of articles in the Law such as treatment for addiction, sanctions for violations, etc. The Ministry of Health is also completing the draft Law on Alcohol Abuse Control to include in the legislation agenda of the National Assembly.

#### *Difficulties and shortcomings*

Programs of infectious disease prevention basically have maintained and exceeded the targets compared to previous years, however tuberculosis, dengue fever, and hand-foot-mouth disease has still not been controlled. In particular, tuberculosis control is a major challenge and Vietnam is ranked 12<sup>th</sup> out of 22 countries with high tuberculosis-related disease burden and 14<sup>th</sup> among 27 countries with a heavy burden of multi-drug resistant tuberculosis. The main difficulty is that control has not yet been achieved in relation to the living environment and understanding of prevention and control among the people.

Programs of non-communicable disease prevention has not reached the majority of the set targets including targets for detection and screening, patient management at primary care facilities, and criteria for building organizational networks and human resources training for the programs. This results from inadequate investment in programs for non-communicable disease prevention and absence of standardization in organization and management of service providers network, especially coordination and integration of service provision activities at the grassroots health facilities and among preventive medicine and medical care facilities.

Food safety programs has achieved initial results, but remain unsustainable, especially in achievement of food hygiene and safety targets and control of food poisoning. This is due to limitations in implementation of responsibilities of sectors and inter-sectoral coordination in management and control of food safety and hygiene in a consistent way throughout the food chain.

*School health:* School health activities remain weak. A national evaluation implemented during the period 2010–2011 showed that only 6 per cent of middle schools and 38.3 per cent of high schools had infirmaries, 40.5 per cent of primary schools and 19.4 per cent of middle schools had dedicated school health staff. At the same time there are still 15.5 per cent of primary schools and 61.5 per cent of middle schools have no staff person assigned to school health activities. Among staff performing school health activities only 53 per cent have professional medical training, while only 0.4 per cent are doctors, the remainder being nurses. Only 50–60 per cent of classrooms meet school hygiene and safety standards including lighting, ventilation and size of chairs and desks appropriate with the pupils. On average only 61.1 per cent of middle schools and 75 per cent of primary schools have restrooms meeting hygiene standards [52].

Programs to improve people's health through policies and interventions to control tobacco and alcohol abuse are still in the process of completion and promulgation of legal

and sublegal documents; guidelines and policies are not adequate and consistent; therefore these interventions are not yet specifically implemented. There is a lack of cooperation and commitment from the authorities, sectors and the participation of the community. Activities to improve physical fitness of the people has received little attention, especially among school pupils in schools and among the workforce.

### **3) Complete the system of policies, consolidate the network and implement effectively activities in the areas of population, family planning and reproductive health**

#### *Implementation results*

Vietnam has made much progress towards achieving reproductive health-related MDGS over the years, and continues to see progress in the past year in relation to targets. Plan targets for the number of mothers given antenatal screening and number of newborns receiving neonatal screening have been exceeded. Total number of new users of contraception achieved 100 per cent of the planned target. Provision of contraceptives and family planning services has been timely and parallel with integrated media campaigns to provide knowledge and skills for the target groups. Starting in 2009, Project No. 52 on controlling population in marine, island and coastal areas for the period 2009–2020 [35] began to be implemented in 151 districts and communes in 28 coastal provinces [36], including tasks to provide sufficient, timely and accurate information on data about population and family planning of the marine, island and coastal areas to meet the requirements for management and direction of the program on population and family planning, in order to contribute to implementing the goals of Vietnam's Marine Strategy to the year 2020.

After two years of implementing the Project on reproductive health and improving child nutrition, which is part of the National Health Target Program for the period 2011–2015, because of limitations in resources the activities on reproductive health of this project have only been implemented in 37 focal provinces, mainly mountainous, disadvantaged areas, and focused on the main contents of reproductive health work, particularly emphasizing safe motherhood and newborn care. Seventeen provinces only participate in implementing reproductive health for youth and one province only supports special payments to village midwives who have received training or retraining on obstetric emergency care for health workers. In 2012, the Project achieved or exceeded targets including: the proportion of women giving birth who have received antenatal care, specifically more than 3 visits over the 3 trimesters, the proportion of women who have received postnatal care, the average number of antenatal visits, the proportion of women giving birth who were assisted by a trained health worker, the abortion ratio [53]. The malnutrition rate (underweight) for children under age 5 in 2012 is estimated at 16.2 per cent, a reduction by 0.6 percentage points compared to 2011 and exceeding the target set by the National Assembly [54]. Currently the Ministry of Health is completing and preparing to submit for approval plans for a pilot package of maternal and child health services, including antenatal care, delivery care, postnatal care, newborn care and care of children up to age six.

#### *Difficulties and shortcomings*

The contraceptive prevalence rate fell 2 percentage points from 2011 to 2012, down to 76.2 per cent. In many provinces implementation of clinical methods of contraception such as sterilization, intra-uterine device (IUD), contraceptives implants have not achieved the plan targets. In some mountainous, island regions, the contraceptive prevalence rate has not yet met plan goals, and fertility has not been controlled. On average between 2010 and 2012, crude birth rates fell 0.1‰ per year, from 17.1‰ (2010) down to 16.9‰ (2012), suggesting



that goals for fertility reduction have been achieved. However, in 2012 compared to 2011 the crude birth rate increased from 16.6‰ (2011) to 16.9‰ (2012) [55]. The population growth rate is higher than the goal by 0.07 percentage points (1.06 per cent compared to 0.99 per cent), population size exceeds the 2012 goal by 100 000 people and sex ratio at birth in 2012 has increased 0.4 (from 111.9 to 112.3). This situation may be a result of a strong preference for giving birth in the Dragon year (2012), leading to this variation in fertility decline. There are large regional differentials including for: maternal mortality ratio (MMR), infant and child mortality, malnutrition rates, sex ratio at birth. One important reasons for this is the lack of commitment and active participation of the local authorities, sectoral agencies in collaboration and support to ensure child nutrition, and activities to control and improve the quality of the population.

Socio-economic inequalities continue to persist in MMR (higher among illiterate, ethnic minorities, farmers, disadvantaged districts), adolescent birth rates (higher in rural mountainous areas, ethnic minority women, and low education), contraceptive prevalence rate and unmet need for family planning (worse outcomes among unmarried people, less educated people, mountainous areas, but also the Red River Delta), percentage of births attended by trained health personnel (lowest in mountainous, rural areas and for ethnic minorities and the poor) and antenatal coverage (lower for mountainous, rural areas and poorest districts) [56].

## **2.6.2. Recommendations on additional solutions to implement and achieve the stated tasks and goals in the Five-year plan**

### **1) Consolidate and strengthen the preventive medicine system and grassroots health network**

- Speed up progress in using state budget to invest in upgrading provincial preventive medicine centers, district health centers, maintaining and developing provincial preventive medicine centers to meet national standards according to Ministry of Health Decision No. 4696/QĐ-BYT and implement commune health benchmarks.
- Reform the organization of the preventive medicine system at the central, provincial and district level towards concentrating and reducing the number of different units, in order to strengthen quality and effectiveness of preventive medicine activities. Develop a coordination and integration mechanism between health units, health programs to ensure continuity and comprehensiveness in surveillance, control of communicable disease and in provision of preventive and curative care services.
- Implement effectively policies in finance, human resources and set up a modern health information system for the preventive medicine network as discussed in the sections above.

### **2) Strengthen preventive medicine and effectively implement the projects of the national health target programs**

- Strengthen active solutions to effectively control dengue fever and hand-foot-mouth disease.
- Prioritize investments in non-communicable disease control, management and surveillance of these diseases and their risk factors in a uniform and integrated way, with close coordination between levels of facilities and health authorities and between preventive and curative care in service provision and management of chronic disease patients.

- Develop concrete solutions to raise the role and responsibility of the authorities, sectoral agencies at all levels in steering and cooperating to implement activities to improve the environment, limit hazards, promote health and increase awareness and responsibility of the community and the population in disease control and health care.
- Develop and implement regulations on the role, responsibility of the education sector in ensuring nutrition, education about avoiding risks of disease and implementing activities to promote health of children and pupils in schools.

### **3) Complete the system of policies, consolidate the network and implement effectively activities in the areas of population, family planning and reproductive health**

- Expand towards universal access to sexual and reproductive health services in order to reduce unmet needs for these services through strengthening the overall six building blocks of the health system.
- Re-assess the organization of population, family planning and reproductive health care service provision, to ensure an appropriate division of responsibility of population agencies and health facilities in clinical and non-clinical professional activities.
- Advocate for commitments and active participation of the authorities at all levels, of the sectoral agencies in cooperation and support of activities for control of population, improvement in population quality, particularly in controlling growth in sex ratio at birth.

## **2.7. Medical service delivery**

### **2.7.1. Implementation status**

#### **1) Reduce hospital overcrowding**

##### *Implementation results*

The Project to reduce hospital overcrowding for the period 2013–2020 approved by the Prime Minister in Decision No. 92/QĐ-TTg dated 9 January 2013 has the immediate goal of reducing overcrowding in oncology, surgery/trauma, cardiology, obstetrics and pediatric specialties in a number of tertiary hospitals in Hanoi and Ho Chi Minh City. It has the complementary objective of improving the quality of medical services in district and provincial hospitals where bed occupancy rates are low, raising the rates to 60 per cent by 2015 and 80 per cent by 2020. Following approval of that policy, the Ministry of Health has approved the Project on Satellite hospitals in Decision No. 774/QĐ-BYT dated 11 March 2013 and has set up a network of 50 satellite hospitals linked to 14 hub hospitals and added 7150 beds for the above 5 overcrowded specialties. The Ministry of Health has also approved the Project on Family doctor in Decision No. 935/QĐ-BYT dated 22 March 2013 aimed at developing a model and management mechanism and piloting family doctor clinics in some provinces.

The number of patient beds, especially actual beds at all levels has increased remarkably. In 2012, there was an increase of 14 269 planned beds and 14 918 actual beds nationally (in the public sector). The ratio of actual beds to 10 000 people in 2012 was 22.4 (not including commune health stations), an increase of 1.4 beds compared to 2011. The additional beds are concentrated in hospitals at the district and provincial levels. Central hospitals have added 1050 new patient beds, including at K Hospital (Oncology), Endocrinology Hospital, Bach Mai Hospital, and Quang Nam Central General Hospital.



In 2012, medical consultations and inpatient admissions increased by 6.8 per cent and 6.0 per cent respectively compared to 2011. The average length of stay for inpatients in 2012 was 7.0, down slightly from 7.1 days in 2011. This figure at the central level fell from 8.5 days to 8.3 days. The bed occupancy rate at all levels decreased from 100.5 per cent in 2011 to 99.4 per cent in 2012, while at the central level the rate fell from 113.2 per cent to 112.5 per cent.

### *Difficulties and shortcomings*

The increase in the number of hospital beds in 2012 has not kept up with the growth in the number of outpatient visits and inpatient admissions, therefore hospital overcrowding has not been improved to any clear extent. Bed occupancy rates (based on actual not planned beds) have decreased slowly and bed occupancy rates in central hospitals continue to exceed 100 per cent. Overcrowding in tertiary hospitals, particularly in some specialties such as oncology, pediatrics, cardiology, gynecology, orthopedics and endocrinology, remains widespread.

The development of human resources for the grassroots level is currently facing many difficulties in terms of both quantity and quality. Policies on salary supplements are not appealing enough to attract medical staff to work at the grassroots level, especially in remote and isolated areas (See details in Chapter I, Section 2.2. on health human resources). The projects to upgrade the provincial and district medical system have been implemented with some delays due to difficulties in mobilizing government bonds or balancing budgets, even though the projects were approved (Project 950, Project 47).

Joint ventures and business partnerships between public and private hospitals have had the benefit of technology development and convenience for patients, but it can easily lead to side effects of over prescription of drugs, tests and high-tech services, which could easily lead to inequity in patient care. The policy allowing provision of medical examination and treatment services of higher quality for a higher fee within public hospitals lacks clear regulations, and therefore can easily lead to conflicts.

Regulations adjusting the referral system and assignment of technical services to specific levels of the health system have not yet been issued. Some projects on non-communicable disease in the National health target program are being implemented and expanding disease management to the community (mental illness, hypertension and diabetes), although implementation is only at a limited scale.

## **2) Improve medical care service quality**

### *Implementation results*

The Minister of Health issued Directive No. 05/CT-BYT dated 9 October 2012 on improving the quality of medical services which focuses on a number of issues including upgrading hospital medical examination clinics and improving several aspects of medical care including: conditions for serving patients, interactions between medical staff and patients, professional conduct, medical ethics and technical quality. Many policies and legal documents guiding the management of medical service quality have also been developed. Several projects to upgrade medical facilities and equipment and strengthen professional competencies of health workers have been implemented and contributed to improving the quality of health care services, especially at the grassroots level. The Minister of Health also issued Decision No. 1313/QĐ-BYT dated 22 April 2013 guiding medical examination procedures at the medical examination clinics in hospitals with specific targets and measures

to reduce waiting time and otherwise improve convenience for patients seeking medical examinations at hospitals.

The Ministry of Health issued and began implementation of Circular No. 01/2013/TT-BYT dated 11 January 2013 guiding quality management of medical laboratory testing. This circular requires that medical facilities make public the results of external laboratory quality assessments. This allows hospitals to have a basis for trusting the quality of lab test results and recognize each other's test results, and in this way to limit duplication of laboratory tests to some extent. The Center for Standardization and Quality Control of Laboratory Testing has been implementing external quality assessment programs. The program to improve quality of laboratory tests continues to be implemented, trainers on quality management for lab tests are being trained. A set of indicators on hospital quality has been developed and preparations being made for it to be piloted at several hospitals.

Ministry of Health Circular No. 19/2013/TT-BYT dated 12 July 2013 guiding implementation of medical service quality management at hospitals has been issued. The National Action Program for medical care quality improvement and hospital quality standards are being developed and reviewed for promulgation. This will serve as the instrument to measure hospital quality; concrete standards will help hospitals improve their quality, and at the same serve as monitoring instruments for stage regulatory agencies and the population.

The medical quality improvement conference and the first national forum on hospital quality organized by the Ministry of Health and the German international cooperation organization (GIZ) was organized in December 2012 with experience sharing from international and foreign organizations and experienced hospitals, thus creating a transformation in awareness of hospital leaders and increased attention from leadership at all levels and the community.

The quality of medical services at the commune level has also received attention. The National Target Program on Building a New Countryside has included activities to focus on investing to upgrade commune health stations to meet the national standards for commune health [57]. Efforts to improve capacity of health workers is gradually receiving increased attention (See details in Chapter I, Section 2.2).

A rapid assessment carried out in 17 hospitals directly managed by the Ministry of Health and 99 provincial hospitals after 3 months of implementing Ministry of Health Directive No. 05 indicates that nearly 30 per cent of hospitals have repaired or renovated inpatient wards, and arranged more patient beds to reduce doubling or tripling up; 35.7 per cent of hospitals under the Ministry of Health and 24 per cent of provincial hospitals have bought more chairs for patient waiting areas at medical examination clinics, 14.3 per cent have installed automatic queue number generators and display screens; 64.3 per cent have publicized price lists of medical services.

The project "Developing patient satisfaction assessment instruments for public medical care facilities" is being formulated.

### *Difficulties and shortcomings*

Many important legal documents have been developed, but not yet issued, such as the National Action Program for medical care quality improvement; criteria and standards of quality for hospitals and other medical care facilities.

The Ministry of Health has drafted a Project on “Developing instruments for assessing patient satisfaction with medical services at public facilities”, but they have still not been developed.

No independent quality accreditation agency has yet been established as stipulated in the Law on Examination and Treatment and Decree No. 87/2011/ND-CP; There is no independent agency responsible for medical service quality accreditation.

### **3) Complete the organizational structure at all levels of health care; effectively organize master plan development for medical services**

#### *Implementation results*

Adjustments to regulations related to the district health system continue to be studied. Master planning of the hospital network is being implemented according to Prime Ministerial Decision No. 30/2008/QĐ-TTg. Currently, The Ministry of Health is developing and refining a new master plan for the development of the health sector, including the system for medical examination and treatment.

#### *Difficulties and shortcomings*

The continuous shifts in organizational structure and management mechanisms has destabilized the organization, disrupted the health workforce and the capacity to provide medical services throughout the grassroots health network and has negatively affected health staff morale. Regulations on the functions and obligations of the district health facilities are still weak, and are hindering the performance of professional tasks. Adjustment to the organization of the health sector at the district level has not yet been possible because it requires first adjusting the Law on Organization of the People's Council and People's Committee.

PPP in medical services lacks clear regulations and controls, and involves the risk of contributing to the increase in provision of unnecessary services for profit.

### **4) Complete the system of legal regulations for implementing the Law on Examination and Treatment**

#### *Implementation results*

In 2012, the Ministry of Health updated and added more than 1000 technical medical procedures guidelines and is reviewing another 2000 technical procedures for approval and promulgation. Hundreds of medical care processes and guidelines at the commune level have been developed, promulgated and are being piloted in three provinces in 2013. During the year the Ministry of Health has issued many circulars, directives and decisions related to professional regulations and standards like: Joint Circular No. 18/TTLT-BYT-BGTVT dated 5 November 2012 of the Ministry of Health and Ministry of Transport stipulating health standards for airline employees and the facilities for health assessment of airline employees; Ministry of Health Circular No. 13/2012/TT-BYT dated 20 August 2012 guiding work in anesthesia and post-surgical recovery; Ministry of Health Directive No. 5 dated 10 September 2012 on strengthening implementation of solutions to improve medical service quality after the adjustments to the medical service price schedule for state medical facilities; Ministry of Health Decision No. 1548/QĐ-BYT dated 10 May 2012 guiding diagnosis and treatment of lead poisoning; Ministry of Health Decision No. 1454/QĐ-BYT dated 4 May 2012 guiding diagnosis and treatment of inflammatory palmoplantar hyperkeratosis syndrome in Quang Ngai province.

The Ministry of Health continues to implement Decree No. 87/2011/ND-CP (2011) on detailed regulations and guidance for implementing some articles of the Law on Examination and Treatment, Ministry of Health Circular No. 41/2011/TT-BYT and Ministry of Finance Circular No. 03/2013 related to granting practice certificates for practitioners and operating licenses for medical facilities.

### *Difficulties and shortcomings*

There is a lack of documents related to the partial or overall suspension and revocation of operating licenses and practice certificates. Issuing operating licenses and practice certificates once for a lifetime and on the basis of the application dossier rather than on the basis of qualifications and practical skill examinations, without a linkage with continuing medical education affects the quality of health professionals.

The legal document system for medical care is still inadequate: Hospital regulations were issued in 1997 and by now much of the content has been replaced by circulars and new guidelines (infection control, nursing, nutrition, hospital pharmaceuticals, emergency, recovery, waste management, etc.), however, many of these regulations still need to be adjusted and altered in order to conform with the Law on Examination and Treatment and to facilitate their implementation in hospitals.

The system of professional guidelines is in the process of being developed and updated. However, over 10 000 technical services and thousands of clinical guidelines create a massive burden for the Ministry of Health, while there is not yet a mechanism for assigning this task to professional medical associations, and therefore progress has been slower than desired.

## **2.7.2. Recommendations on additional solutions to implement and achieve the stated tasks and goals in the Five-year plan**

### **1) Reduce hospital overcrowding**

- Urgently issue guidance on the technical referral system and a circulars guiding appropriate referral to reduce intermediaries and reduce hassles for patients. Strengthen referral with effective feedback from higher levels to lower levels.
- Actively implement projects on reducing hospital overcrowding, satellite hospital projects, concentrate on technology transfer, strengthen professional capacity for lower levels (See Chapter I, Section 2.2).
- Focus on management of chronic and non-communicable diseases. Bring into play the role, function and tasks of preventive medicine facilities for health information, education and communication and health management and promotion and active prevention.
- Strengthen control over service delivery quality, especially through strengthening outpatient treatment, controlling inpatient admissions, expanding day treatments and day surgeries. Add these types into the basic medical service provider categories in the Law on Examination and Treatment and adopt user fee policies accordingly.

### **2) Improve quality of medical services**

- Develop and supplement documents regulating and guiding improvement of service quality, develop action programs with specific projects for particular areas in order to design the national quality system and effectively implement activities. Strengthen

training and guidelines for application of quality management methods at medical facilities.

- Develop criteria, standards, tools and mechanisms for quality accreditation for hospitals, commune health stations and other medical care facilities. Develop a project to develop quality standards and criteria; Complete the set of hospital quality indicators.
- Establish an independent quality accreditation agency and implement an independent quality accreditation mechanism to assess and recognize the quality for medical care facilities; Develop a project on quality accreditation and another on open assessment of hospital quality.
- Develop guidelines for provision of medical examination and treatment on demand, and adjusted guidelines aimed at limiting negative effects of PPP in public hospitals. Develop and issue regulations on routine laboratory tests used for inpatients, outpatients and medical examination visits.
- Establish financial and non-financial incentive mechanisms for quality certified service providers. Study and develop a model for reimbursement by health insurance for services provided at the commune level and introduce results based financing policies for commune health stations that achieve quality standards.
- Standardize medical treatment techniques and strengthen technical transfer to improve professional and technical competence of lower levels. Strengthen inspection and checking of private health sector activities. Set up inspection of medical care at different levels of public administration in order to closely manage private sector professional activities and compliance with the Law.
- Develop the Project to build a methodology for assessing patient satisfaction.

**3) Complete the organizational structure at all levels of health care; effectively organize master plan development for medical services**

- Study and propose a district health model suitable with different socio-economic areas.
- Continue to study and introduce mechanisms for close collaboration between curative and preventive care, especially at the commune and district level.
- Develop competency standards related to basic service provision at district hospitals.
- Study forms of PPP in the field of medical service delivery (See Details in Chapter I, Section 2.1).

**4) Complete the system of legal regulations for implementing the Law on Examination and Treatment**

- Consider adjusting the Law on Examination and Treatment towards: licensing practitioners on the basis of practical skill examinations, granting licenses that are renewable after a set period of time, and linking renewals with requirements for continuing medical education.
- Review and set priorities for drafting, developing and issuing professional guidelines, first of all for common and widespread medical conditions.

### 3. Status of implementing targets of the Five-year plan 2011–2015

The Plan for the protection, care and promotion of the people's health for the period 2011–2015 (Five-year plan) was developed based on major socio-economic development orientations and tasks and the policies of the Communist Party and Government towards the health sector. Based on the analytical framework of health systems developed by WHO, the Five-year plan identified 19 health indicators for monitoring and assessing objectives and orientations of health development. Table 1 below summarizes progress towards achieving these 19 health sector indicators.

Regarding input indicators, including those related to human resources and patient beds, four out of six targets were met during the period 2010–2012. Specifically, in 2012 the number of doctors per 10 000 people increased from 7.33 to 7.46; the number of university-trained pharmacists per 10 000 people rose to 1.9 in 2011, exceeding the target set for 2015; the proportion of communes with a doctor exceeded the goal for 2012; the ratio of beds to 10 000 people (not including commune health stations) increased to 24.3 in 2012, compared to 22.5 in 2011, exceeding the 2015 target. Nevertheless, in this group there are 2 targets that were not met, including the proportion of villages served by a village health worker, which has not met the target for the whole period (mainly because the proportion of urban blocks with village health workers is low) and the proportion of communes with an obstetrics/pediatrics assistant doctor or midwife has fallen to 93.4 per cent, thus falling short of the target for 2012.

Among the process indicators, two have met or exceeded the target for each year. The proportion of children under one year of age who have been fully vaccinated using 7 vaccines in 2010 and 8 vaccines in 2011 and 2012 have exceeded the target for each year. Similarly, the proportion of the population covered by health insurance increased nearly 1.8 percentage points to 66.8 per cent, higher than the target of 66 per cent (this five-year plan target was adjusted in the Project for implementing the roadmap towards universal health insurance for the period 2012–2015 and 2020 approved by the Prime Minister in Decision No. 538/QĐ-TTg dated 29 March 2013). The proportion of communes achieving the national benchmarks for commune health is much higher than the plan target. This is because data gathered for this indicator includes some communes assessing the new benchmarks for the period 2011–2020 according to Ministry of Health Decision No. 3447/QĐ-BYT dated 22 September 2011 and some making the assessment based on the old benchmarks. Therefore, achievement is high in relation to old benchmarks but low according to the new benchmarks.

**Table 1: Status of implementing basic health targets in the Five-year plan, 2011–2015**

	Indicators	2010	2011	2012	2015 target
	<b>Input indicators</b>				
1.	Number of doctors per 10 000 population	7.20	7.33	7.46 (7.4)	8
2.	Number of university-trained pharmacists per 10 000 population	1.8	1.9	.. (1.4)	1.8
3.	Proportion of villages served by village health workers (%)	78.8	82.9	81.2 (87)	90
4.	Proportion of communes with a doctor (%)	70.0	71.9	76.0 (74)	80
5.	Proportion of communes with obstetrics/pediatrics assistant doctor or midwife (%)	95.6	95,3	93.4 (>95)	>95



	Indicators	2010	2011	2012	2015 target
6.	Number of hospital beds per 10 000 population (excluding CHS)*	21.7	22.5	24.3 (21,5)	23
	<b>Process indicators</b>				
7.	Proportion of children under 1 year of age fully immunized (%) ( <i>7 vaccines in 2010 and 8 vaccines from 2011–2015</i> )	94.6	96.0	95.9 (>90)	>90
8.	Proportion of communes meeting national commune health benchmarks (Data for 2011–2012 include a mix of those meeting old and new standards)	80.1 (old benchmarks)	76.8	74.1 (45)	60
9.	Proportion of the population covered by health insurance (%)	60.3	65.0	66.8 (66*)	70*
	<b>Outcome indicators</b>				
10.	Average life expectancy (years)	72.9	73.0	73.0 (73.4)	74.0
11.	Maternal mortality ratio (per 100 000 live births)	69 (2009)	..	.. (66)	58.3
12.	Infant mortality rate (‰)	15.8	15.5	15.4 (15.3)	14.8
13.	Under-five mortality rate (‰)	23.8	23.3	23.2 (23)	19.3
14.	Population size (million people)	86.9	87.8	88.77 (88.67)	<92
15.	Annual reduction in fertility (‰)	0.5	0.5	-0.3 (0.1**)	0.1**
16.	Population growth rate (%)	1.05	1.04	1.06 (0.99)	0.93
17.	Sex ratio at birth (boys per 100 girls)	111.2	111.9	112.3 (112)	<113
18.	Malnutrition rate of children under age 5 (%) (weight for age)	17.5	16.8	16.2 (16.6)	15.0
19.	HIV/AIDS prevalence rate (%)	0.21	0.22	<0.24 (<0.3)	<0.3

Note: Values in ( ) indicate the target for the year 2012 and the last column indicates the goals for 2015 in the Plan for the protection, care and improvement of the people's health 2011–2015 dated December 2010. \*The target for health insurance coverage for 2015 was adjusted downward from 80 per cent to 70 per cent according to Prime Ministerial Decision No. 538/QĐ-TTg dated 29 March 2013 approving the Project for implementing the roadmap for universal health insurance coverage 2012–2015 and 2020. \*\*The indicator on fertility rate decrease was adjusted down to 0.1‰ for the period 2012–2015 according to Decision No. 1199/QĐ-TTg dated 31 August 2012 approving the National target program for population and family planning for the period 2012–2015. Attention to the 2012 figure indicating an increase (not decrease) of 0,3‰, thus represented by a negative decrease. CHS=Commune health station

Sources: Indicators 1-8: Health Statistics Yearbook; Indicator 9: (2010–2011 Health Statistics Yearbook, 2012 Health Insurance Department, MOH; Indicators 10, 12-17: Survey of Population Change and Family Planning 1 April 2012 [55]; Indicator 11: Latest figure from Population and Housing Census 1 April 2009 [58], no source for 2010–2012; Indicator 18: National Institute of Nutrition [54]; Indicator 19: Vietnam Administration of HIV/AIDS Control [45].

With regard to the outcome indicators, two Five-year plan targets have been achieved or exceeded. Notably among these indicators, the malnutrition rate for children under age five (underweight in terms of height for age) and the HIV/AIDS prevalence in the community indicate that the targets have been more than achieved, particularly for 2012. This is a good sign regarding the ability to achieve the MDGs by 2015. However, there are several indicators that have not met the plan targets. Specifically the infant mortality rate (IMR) is higher by 0.1 deaths per 1000 live births and under-five mortality rate (U5MR) is higher by 0.2 deaths per 1000 live births compared to the 2012 plan target. Life expectancy in 2012 reached 73 years, thus falling short of the goals for 2011 and 2012 of 73.2 and 73.4 years. With this pace of achievement, it will be difficult to achieve the 2015 life expectancy goal of



74 years. In addition the sex ratio at birth in 2012 increased to 112.3 boys per 100 girls, slightly higher than the goal of constraining the ratio to 112 or below in 2012. In 2012 fertility increased so the goal of reducing fertility was not met, the population growth rate reached 1.06 per cent (2012 target was 0.99 per cent) and population size reached 88.77 million people, exceeding by 100 000 people the 2012 goal of 88.67 million people. There is no regular, reliable source of information to assess the MMR. The latest estimates indicate that the MMR had fallen to 69 deaths per 100 000 live births by 2009, according to the Population and Housing Census [58]. With these mid-plan results, it is still possible to achieve all the goals, but some areas will require substantially increased efforts.

#### 4. Status of implementing the MDGs

Of the 8 MDGs that the 198 United Nations member states agreed to strive to achieve by 2015, five are closely related to health. Of these MDGs, some were targeted solely at health and some others were related to health, specifically:

- **MDG 1:** Halve, between 1990 and 2015, the proportion of people who suffer from hunger [Specific target used in Vietnam is to halve the malnutrition rate (weight for age) among children under age five between 1990 and 2015].
- **MDG 4:** Reduce by two-thirds, between 1990 and 2015, the U5MR [Additional target used in Vietnam is to reduce by two-thirds the IMR and increase the vaccination rate against measles for children under one year of age].
- **MDG 5:** Reduce by three quarters, between 1990 and 2015, the MMR; and promote universal access to reproductive health services.
- **MDG 6:** Halt and begin to reverse the spread of HIV/AIDS; achieve by 2010 universal access to treatment for HIV/AIDs for all who need it; halt by 2015 and begin to reverse the incidence of malaria and other major diseases [major disease of importance in Vietnam is tuberculosis].
- **MDG 7:** Halve, between 1990 and 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitary conditions. [Specifically in Vietnam the goal is by 2015 to ensure that 68 per cent of households have a sanitary toilet].

These MDGs were categorized by indicator groups to facilitate assessment of performance. This Section of the report will focus on the key points of implementing these five MDGs using readily available health indicator data.

##### **MDG 1: Halve the malnutrition rate (weight for age) among children under age five between 1990 and 2015**

Nationally, the malnutrition rate (weight for age) among children under age five has decreased rapidly and sustainably since 2000. The malnutrition rate (weight for age) among children under age five decreased by 24.8 percentage points, from 41 per cent in 1990 to 16.2 per cent in 2012 [54], indicating a reduction by more than 60 per cent compared to 1990, exceeding the goal of halving malnutrition. This goal was achieved 4 years early. Nevertheless, in some regions such as the Central Highlands, the child malnutrition rate remains high at 25 per cent in 2012, compared to the regional goal of 23.5 per cent by 2015, requiring an additional decline of 1.5 percentage points in the remaining 3 years (2013–2015) in order to meet the regional goal (Table 2).

**Table 2: Malnutrition rate (underweight) of children under age 5 by region, 1990, 2012 and 2015 goal**

	1990	2012	2015 goal	Results
National	41.0%	16.2%	20.5%	Achieved
Red River Delta	44.0%	11.8%	22.0%	Achieved
Northern midlands and mountains	50.5%	20.9%	25.3%	Achieved
North and South Central Coast	46.0%	19.5%	23.0%	Achieved
Central Highlands	47.0%	25.0%	23.5%	Not achieved
Southeast	36.0%	11.3%	18.0%	Achieved
Mekong River Delta	40.0%	14.8%	20.0%	Achieved

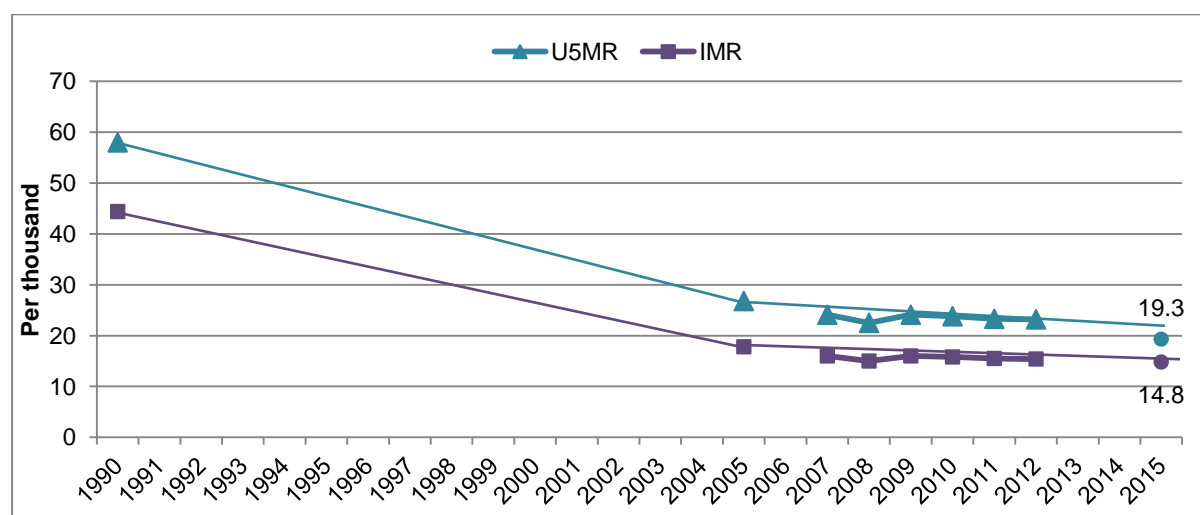
Source: National Institute of Nutrition

**MDG 4: Reduce by two-thirds, between 1990 and 2015, the U5MR and IMR; increase the vaccination rate against measles for children under one year of age**

The IMR has decreased from 44.4 per 1000 live births in 1990 to 15.4 [55] by 2012. Hence, a reduction of only 0.6 per thousand live births is required to achieve the 14.8 per 1000 live birth goal by 2015, and it is possible to achieve this goal on time.

The U5MR has decreased from 58 per thousand live births in 1990 to 27.5 in 2005. However from 2010 to 2012, this rate fell only slightly, from 23.8‰ to 23.2‰ [55]. To achieve the goal of 19.3‰ by 2015, a reduction of 3.9 deaths to children under age five per 1000 live births is required over the next 3 years. Thus, achievement of this goal will require substantial effort, focusing on regions with high U5MRs and causes of death in children such as accidents and perinatal death (Figure 9).

**Figure 9: Trends in infant and U5MR, 1990~2012 and goal by 2015**



Source: GSO [55]

The proportion of children under age one vaccinated against measles from 55 per cent in 1990 to 95.6 per cent in 2008 and maintained above 95 per cent through 2012. With the goal of greater than 90 per cent immunization coverage to stop the spread of measles, this goal will be achieved. However, according to MICS 2011, the rate of infants vaccinated against measles as reported based on mother's knowledge of child vaccination was only 84

per cent [56]. This suggests that child immunization recording and increasing mother's awareness about immunization need to be strengthened.

**MDG 5: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio (5A) and promote universal access to reproductive health services (5B).**

The MMR per 100 000 live births decreased considerably, from 233 in 2000 to 80 in 2005 and 69 in 2009 [58]. This means that to reach the goal of 58.3 per 100 000 live births, it will be necessary to achieve a reduction of more than 10 maternal deaths per 100 000 live births by 2015. Many interventions such as training ethnic minority village midwives, supporting the establishment of community-based referral groups, training to strengthen health worker capacity to deal with obstetric emergencies, implementing C-sections and blood transfusion at the district hospital have been and continue to be implemented. However, effective interventions like these have not yet been scaled up nationwide and have not yet achieved the desired results due to limited resources invested in reproductive health. In addition, there is a lack of reliable data to monitor implementation progress and effectiveness the interventions aimed at achieving this goal. Substantial socio-economic disparities exist with MMR highest among illiterate women, ethnic minorities, farmers, and disadvantaged regions [56].

The percentage of pregnant women receiving at least 3 antenatal care visits reflects quality of antenatal care and constitutes an important factor for reducing obstetrics complications, ensuring safe delivery and reducing maternal and neonatal mortality. Between 2005 and 2009, the proportion of pregnant women receiving at least 3 antenatal care visits increased gradually over time, from 84.6 per cent in 2005 to 87.7 per cent in 2009. Since 2010, this indicator (and norm) has been replaced by the proportion of women receiving more than 3 antenatal care visits over the three trimesters of the pregnancy, in order to evaluate the quality of pregnancy management, detect in a timely fashion any risk factors that could influence the mother or the baby. This proportion reached 89.4 per cent in 2012. However, antenatal care use is lowest in mountainous and rural areas and under 50 per cent for the 25 poorest districts. Coverage of recommended antenatal interventions is suboptimal.

The proportion of women giving birth who were assisted by a medical worker increased from 55 per cent to 97.9 per cent in 2005 and has been maintained at above 97 per cent since 2010 [2]. Nevertheless, according to MICS, this rate was only 92.9 per cent [56], and women in mountainous and rural areas, ethnic minority and poor women have a lower proportion whose deliveries were attended by trained personnel.

The contraceptive prevalence rate among married women in reproductive age has increased only 4.3 percentage points over 10 years (2001–2011), thus Vietnam will require substantial efforts to reach the goal of 82 per cent by 2015, particularly among unmarried people. Contraceptive prevalence rates have decreased over the last three years in the Red River Delta and in mountainous areas, and are significantly lower for women with lower educational attainment. In 2011, the proportion of married women with unmet need for family planning was 4.3 per cent [56]. There has been an increase in unmet need for family planning between 2002 and 2010, and disparities of higher unmet need among ethnic minority and poor women, but especially among unmarried, sexually active women. Unmet need for modern contraception is similar between married women and those living in a union (29.1 per cent and 30.3 per cent), but much higher among single sexually active women

Adolescent birth rates have fluctuated over time, with a slight increase in the last few years. Rates are significantly higher in rural mountainous areas, 10 times higher for ethnic minority women, and over 3 times higher among women with low educational status.

## **MDG 6: Halt and begin to reverse the spread of HIV/AIDS, malaria and tuberculosis**

### **MDG 6A. Halt and begin to reverse the spread of HIV by 2015**

From the detection of the first case of HIV infection case in December 1990 up through 2001, the prevalence of HIV infection increased by 43 410 cases (55.17/100 000 persons). By 2005 the number of people infected with HIV nationwide increased to 104 111 (126/100 000 people). By 2012 the cumulative number of people infected with HIV increased to 210 703 people [45]. This means that Vietnam has managed to control the prevalence rate of HIV/AIDS below 0.3 per cent of the population, achieving the target of the National strategy on HIV/AIDS control to the year 2020. Among most at risk populations (MARPs), HIV prevalence among injecting drug users has fallen to 13.4 per cent in 2011, back to the level of 1997 [59]. However, the HIV prevalence among men having sex with men appears to be increasing [60]. In 2011, the number of new infections was 10 958 (incidence rate at 13.9/100 000), by 2007 it had reached a peak at 30 846 new cases per year, but since 2008 it has seen a downward trend, reaching 17 780 new cases in 2011 and 11 102 new cases in the first 11 months of 2012.

Regarding condom use, results of the Behavioral survey in 2012 (at surveillance focal points) indicated that the percentage of female sex workers who used condoms in their latest sexual intercourse with their clients was 89 per cent. Quang Ninh province had the highest percentage of female sex workers using condoms in their latest sexual intercourse with their clients (96.8 per cent), followed by the provinces of Thua Thien-Hue, Thai Binh and Bac Giang (96.7 per cent), Thanh Hoa (96 per cent), Da Nang, Nam Dinh, Binh Dinh (over 95 per cent). If this figure is maintained, the goal of over 80 per cent condom use in last high risk sex can be considered achieved.

### **MDG 6.B. Achieve by 2010 universal access to treatment for HIV/AIDs for all who need it**

The ARV treatment program in Viet Nam was initiated in 2000 and has been expanded to the entire country in 2005. By September 2012, 69 882 people infected by HIV were being treated with ARV, including 66 167 adults and 3715 children, an increase of 26 times compared to the end of 2005. In 2012, the treatment program met about 68.3 per cent of the need for adults and 81.3 per cent of the need for pediatric cases whose CD4 count has fallen below the threshold (250 cells per mm<sup>3</sup>) identifying need for treatment [60]. Sustaining this result is a major challenge as donors cut assistance [44].

### **MDG 6C: Halt, by 2015, and begin to reduce the incidence of malaria**

With efforts made by the health sector in general and the malaria control network in particular in the past decades, with the strong commitments of the Government of Viet Nam and support from various international organizations and development partners, the Malaria Control Program has made significant achievements in terms of decreasing morbidity and mortality from malaria. Compared with the year 2000 when the MDGs were developed, by 2012, malaria morbidity had fallen by 49 per cent and malaria mortality had fallen by 68 per cent, with the number of malaria patients falling each year. By 2011, the malaria morbidity rate had declined to 49/100 000 persons and the malaria mortality rate had fallen to 0.01/100 000 persons.

### **MDG 6D: Tuberculosis control**

According to a Ministry of Health Report [61], the global MDG to reduce tuberculosis prevalence and mortality by 50 per cent from 1990 to 2015 has been exceeded with an

estimated 62 per cent reduction in prevalence and mortality compared to 1990. The goal of the Western Pacific Region to halve prevalence and mortality from tuberculosis between 2000 and 2015 has not yet been achieved according to this report since prevalence has only fallen by 40 per cent and mortality by 38 per cent between 2000 and 2011.

However, according to United Nations Statistics, by 2011 Vietnam had only reduced prevalence by 20 per cent and mortality by 28 per cent [62] compared to 1990, while the goal was a 50 per cent reduction compared to 1990 (Table 3). Therefore, it is necessary to continue to strongly reduce tuberculosis prevalence and mortality over the next 3 years (2013–2015).

**Table 3: Tuberculosis control situation (MDG 6), 2011**

	<b>Goal</b>	<b>Performance by 2011</b>
MDG-STP* Prevalence	Reduce 50% between 1990 and 2015	403/100 000 in 1990, declined to 323/100 000 in 2011 (20% reduction)
MDG-STP Mortality	Reduce 50% between 1990 and 2015	43/100 000 in 1990, declined to 33/100 000 in 2011 (28% reduction)

Note: \*STP=Stop TB Strategy

Source: United Nations [62]

**MDG 7: Halve, between 1990 and 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation; by 2015 ensure that 68 per cent of households have access to a sanitary toilet**

In order to assess the progress of MDG 7 performance, the United Nations member countries, including Vietnam, agreed to use the results of WHO/UNICEF Joint Monitoring Program for Water Supply and Sanitation (JMP). In Vietnam, the Joint Monitoring Program (JMP) was conducted by WHO/UNICEF in collaboration with the GSO. In accordance with the published JMP Report, Vietnam has achieved MDG 7 in terms of both clean water and sanitation. Yet, 19.5 million persons still do not use a sanitary toilet and 7.1 million people do not yet use safe drinking water.

**Table 4: Progress towards achieving MDGs in Vietnam, 1990, 2012**

Goal	Indicator	Baseline data and year	2012	2015 Goal	Data source
<b>MDG 1: Reduce poverty and hunger</b>					
<b>Indicator 1C:</b> Halve the proportion of people suffering from hunger between 1990 and 2015	<b>1.8 Malnutrition rate for children under age 5 (weight for age)</b>	41% (1990)	16.2%	20.5% Achieved	National Institute of Nutrition [54]
<b>MDG 4: Reduce child mortality</b>					
<b>Indicator 4A:</b> Reduce under-five mortality by two-thirds between 1990 and 2015	<b>4.1 Under-five mortality rate</b>	58 (1990)	23.2	19.3 Difficult to achieve	GSO [55]
	<b>4.2 Infant mortality rate</b>	44.4 (1990)	15.4	14.8 Feasible	GSO [55]
	<b>4.3 Measles immunization rate</b>	55%	96.4%	>90 per cent Feasible	Health Statistics, MOH
<b>MDG 5: Improve maternal health and universal access to reproductive health</b>					
<b>Indicator 5A:</b> Reduce maternal mortality rate by three-quarters between 1990 and 2015	<b>5.1. Maternal mortality ratio</b>	233/100 000 (1990)	69/100 000 (2009)	58.3/100 000 Major effort required	GSO [58]
	<b>5.2 Proportion of deliveries assisted by a trained health worker</b>	86% (2001)	97.9%	96–98% Feasible	Health Statistics, MOH
<b>Indicator 5B:</b> Universal access to reproductive health by 2015	<b>5.3 Contraceptive prevalence rate (CPR)</b>	73.9% (2001)	76.2%	82% Major effort required	GSO [55]
	<b>5.5 Proportion of women giving birth who had 3 or more antenatal visits over 3 trimesters</b>	87.9% (2004)	89.4%	80–87% Achieved	Health Statistics, MOH
<b>MDG 6: Combat HIV/AIDS, malaria and other diseases</b>					
<b>Indicator 6A:</b> Halt and begin to reverse the spread of HIV/AIDS by 2015	<b>6.1 Prevalence of HIV infection in population aged 15-49 and among the population over age 15 in most at risk populations (MARPs)</b>	N/A	15-49: 0.45% (EP 2011) IDUs: 13.4% (HSS 2011) FSWs: 3% (HSS 2011) MSM: 16.7% (IBBS 2009)	N/A	National Committee for AIDS, Drugs and Prostitution prevention and control [60]; IBBS 2009



Goal	Indicator	Baseline data and year	2012	2015 Goal	Data source
	<b>6.2 Condom use rate at last high-risk sex</b>	51.9% (PWID) 77.7% (FSWs 66.5% (MSM) (IBBS, 2009)	80.2% (PWID) 89.7% (FSWs) 71.5% (MSM) (HSS+, 2011)	≥ 80%	IBBS and HSS+
<b>Indicator 6B:</b> Universal access to treatment for HIV/AIDS for all those who need it by 2010	<b>6.4 Proportion of population with advanced HIV infection with access to ARV drugs</b>	5% (EP, 2005)	53% (EP, 2011) 68.3% for adults and 81.3% for children in 2012	70% Difficult to achieve	EP
<b>Indicator 6C:</b> Halt by 2015 and begin to reverse the incidence of malaria	<b>6.6 Malaria incidence and death rates</b>	Incidence rate: 96/100 000 Mortality rate: 0.031/100 000 (2000)	Incidence rate: 49/100 000 Mortality rate: 0.01/100 000	Achieved	Health Statistics, MOH
<b>Indicator 6D:</b> Control Tuberculosis	<b>6.10 Tuberculosis prevalence rate</b>	375/100 000 (2000)	225/100 000 (2011)	187/100 000 Feasible	Ministry of Health [61]
		403/100 000 (1990)	323/100 000 (2011)	Difficult to achieve	United Nations [62]
<b>MDG 7: Ensure environmental sustainability (focusing on safe water and sanitation)</b>					
<b>Indicator 7C:</b> Halve the population without sustainable access to basic sanitation and clean drinking water	<b>7.1 Proportion of population using sanitary toilet</b>	37% (1990)	78% (2011)	68.5% Achieved	WHO/UNICEF JMP
	<b>7.2 Proportion of population using safe drinking water source</b>	57% (1990)	92% (2011)	78.5% Achieved	WHO/UNICEF JMP

Note: The coding of goals and indicators comes from the United Nations [62]; EPI=Expanded program on immunization; EP= Estimates and projections [63]; PWID = People who inject drugs; FSW = Female sex workers; MSM= Men who have sex with men; IBBS= Integrated behavioral and biological surveillance [59]; HSS = HIV sentinel surveillance.

Results in Table 4 shows that in general, statistical data indicate improvement in the average situation of the country. However, if indicators are disaggregated by region, disparities between regions are rather large and there is a risk that gaps could expanding. Results indicate successes and challenges Vietnam faces in ensuring equity in health care. Through the synthesis of data, another difficulty and challenge is evident for all five MDGS related to health, namely data and statistics from official sources are not consistent, or even conflict with each other, so verification and careful consideration in their use is necessary. Another problem is worth attention, that is the shortage of data and evidence. Because there is a lack of national standard data on implementation, monitoring progress and performance towards MDGs related to health faces many difficulties.

### General remarks

**The health goals stated in the Five-year plan:** The Five-year health sector plan included 19 indicators that can be classified into three groups to monitor implementation. A majority of these represent targets set by the National Assembly and Government. Results

indicate that the input indicators (6 indicators) and process indicators (3 indicators) generally show results that meet or exceed the targets in the Plan. However, in the outcome indicators (10 indicators), only two indicate achievement of the target, while four indicators show results close to the target and three indicators remain far from the target or lack information sources for monitoring. Thus, among the outcome indicators, targets for life expectancy, sex ratio at birth, population growth, fertility decline, population size and MMR require increased attention in the near future in order for the targets to be achieved sustainably.

**Vietnam has made significant progress towards achieving the health-related MDGs (MDGs 1,4,5,6 and 7).** In reality, some goals have been reached sooner than 2015. However, in the coming 3 years, Viet Nam needs to sustain and speed up progress, especially as regards the indicators showing slow progress such as reduction in MMR, increase in contraceptive prevalence rate, increasing the proportion of HIV infected individuals who can access ARV, and reducing morbidity and mortality from tuberculosis. Reaching the goals to which the Government has committed will require effort not only from the health sector, but contributions from other sectors, and for some goals, the efforts of the entire society. At the national level, priority should be placed on: (i) access to HIV treatment; (ii) reduction in MMR and IMR in mountainous and ethnic minority regions; (iii) unmet need for contraception, particularly among immigrant women, single persons, and youth in mountainous and disadvantaged areas; (iv) detection and treatment of tuberculosis; and (v) access to better sanitary conditions in mountainous/rural areas.

**Monitoring and evaluation indicators:** The JAHR 2013 report continues to refine the monitoring and evaluation indicators in order to reflect trends and results in the process of implementing major goals of the health system. The indicators have been reorganized following 3 groups: inputs, processes and outcomes.

Completion of the monitoring and evaluation indicators (see Appendix) focused on the main indicator groups for monitoring and evaluation of performance in implementing the Five-year plan, MDGs and monitoring indicators of the national health target programs. Input indicators include: human resources, infrastructure, finance, drugs and biologicals. Process indicators include indicators related to service coverage, behavior change and risk factor reduction. Outcome indicators include those related to health improvement and financial protection. Many indicators are disaggregated by region or sex or living standards in order to also evaluate equity and regional disparities.

## **PART TWO: TOWARDS UNIVERSAL HEALTH COVERAGE**

## Chapter II: Theoretical framework and concepts related to universal health coverage (UHC)

In recent years, the topic of “universal health coverage” has been discussed extensively in various international forums and is increasingly seen as critical to delivering better health care and as a goal consistent with health system development [64].

Over many years, Vietnam has made substantial efforts to ensure access to healthcare services, of gradually increasing quality, for the entire population through programs of upgrading the health system, expanding health insurance coverage and increasing state budget spending on health. Nevertheless, like other developing countries, Vietnam still faces many challenges and difficulties.

Universal healthcare coverage was selected for in-depth analysis in JAHR 2013, with the aim of assessing the situation in Vietnam, consulting international knowledge and experience, and recommendations of the United Nations and other international organizations to propose relevant solutions for continued reforms and strengthening of the Vietnamese health system towards UHC.

### 1. Conceptualization of “universal health coverage”

According to the United Nations, “Universal health coverage implies that all people have access, without discrimination, to nationally determined sets of the needed promotive, preventive, curative and rehabilitative basic health services and essential, safe, affordable, effective and quality medicines, while ensuring that the use of these services does not expose the users to financial hardship, with a special emphasis on the poor, vulnerable and marginalized segments of the population”. This conceptualization from the United Nations is consistent with key WHO concepts: “Universal coverage (UC), or universal health coverage (UHC), is defined as “ensuring that all people can use the promotive, preventive, curative and rehabilitative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship” [65].

The above conceptualizations indicate that UHC aims at three goals:

- *Equity in access to healthcare services:* All people in need of healthcare services, without discrimination, have access to healthcare services regardless of their ability to pay;
- *Delivery of basic, comprehensive healthcare services:* Including basic promotive, preventive, curative and rehabilitative health services *of sufficient quality* to be effective in improving health of the service user;
- *Protection from financial risks:* Affordability so that use of these services should not expose the user, especially poor and vulnerable groups, to financial difficulties.

Implementing UHC is a process that requires progress on several fronts: the availability of health care services; conditions for providing quality and effective services (governance, health financing, human resources, drugs, equipment, medical consumables, infrastructure, health information system,...); the proportion of the population covered; and level of financial protection when using health services. The goal of UHC is not limited to a fixed minimum package of services [66]. The idea that universal coverage is a continuously developing process without a “completion” point is recognized by various international organizations [67] (see Box 1).

### Box 1: General principles of Universal health coverage

- UHC should be assessed on three dimensions: Who is covered; which services are covered; and proportion of costs covered.
- Revenue from taxes constitutes the main financial resource in all countries implementing UHC, especially low-income and lower middle-income countries, because of the large informal employment sector. The government should prioritize use of the state budget to support the informal employment sector to achieve UHC.
- Risk pooling, in which the affluent assist the poor and the healthy assist the sick, is a crucial factor for effective coverage. The general trend is towards decreasing the number of funds in order to strengthen risk pooling.
- Countries should shift to pre-payment schemes (through tax-based or social security-based health financing) and minimize collection of user fees directly from the patient.
- Equity is a goal of UHC and typically difficult to achieve, at least in the initial stage, due to difficulties related to the large informal employment sector and the access to services among the Poor.
- UHC is a moving target: The process of striving towards UHC has no end, due to continual changes in medical technology, disease burden and population structure. UHC should be seen as a process and a goal to aim for, rather than a target to be achieved and then considered “completed”.
- Compromise/trade-off is necessary to ensure feasibility. Countries are always challenged by shortages of resources, requiring constant balancing and trading off among the different dimensions of UHC.
- Every country has distinct features: There are policies that can help countries achieve greater coverage with lower costs, but the combination of policy choices will be distinct for each country.
- Pursuing UHC is a continual process. All countries, even the poorest ones, can implement UHC step by step in a continual process.

## 2. Key requirements to achieve universal health coverage

### 2.1. Health systems to meet the need for universal health coverage

Health systems implementing the goal of UHC must be well functioning, easily accessible and with a leading role for the State [68]. Ensuring access to essential drugs and medical equipment and development of information technology are also urgent requirements in the process of implementing universal coverage [64]. Fundamental requirements

throughout the process of implementing UHC include expanding access to services, controlling costs and strategic purchasing [69].

United Nations General Assembly Resolution No. A/67/L.36 (2012) recognizes that “effective and financially sustainable implementation of UHC is based on a resilient and responsive health system that provides comprehensive primary health-care services, with extensive geographical coverage, including in remote and rural areas, and with a special emphasis on access to populations most in need, and has an adequate skilled, well-trained and motivated workforce, as well as capacities for broad public health measures, health protection and addressing determinants of health through policies across sectors, including promoting the health literacy of the population” [70].

### Health service delivery

The general requirements call for people-centered health service delivery: health care services need to be organized around and focused on the needs and expectations of the people and the community, not around diseases and not hospital-centric [71]. First of all it is necessary to ensure comprehensive primary health service delivery, covering all geographic areas of the country, and paying special attention to vulnerable groups. Investing in development of the PHC system, so all people can easily access affordable health care services, is the most fundamental factor in implementation of universal coverage (based on experience of Thailand) [72]. In this day and age, when non-communicable diseases account for over 70 per cent of the burden of disease, especially in developing countries, the role of PHC is even more important. Ensuring uniform quality of primary care services across geographic areas is necessary so all people can access quality health care services in their communities. Hospitals must have adequate ability to deliver and prioritize quality medical services to meet the essential needs of the people after they have received PHC services.

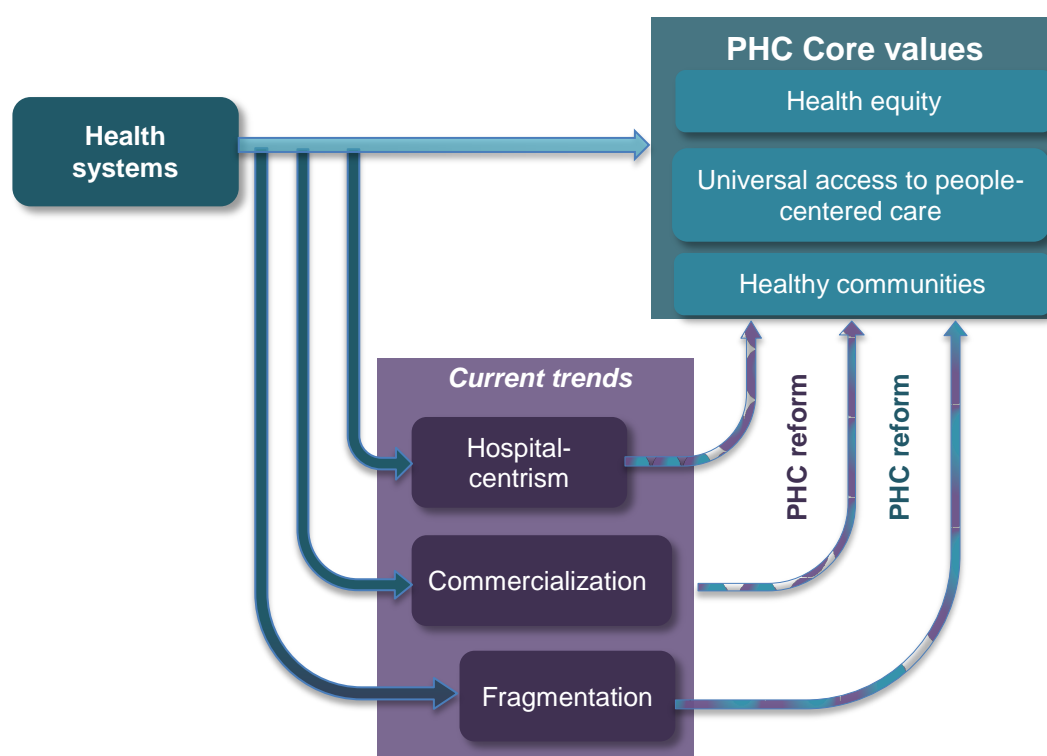
*Health services, drugs, and medical consumables* must be selected to meet the curative care requirements at low cost that is affordable to the state health care budget, the health insurance fund and the people’s ability to pay or co-pay. A health system with a proper UHC should be able to control cost increases through “cost-effective prevention, early detection, and management of many conditions in the community or in homes.” “Officials can fix prices and fees, adjust provider incentives, introduce policies that promote generic drugs, and rationalize the use of expensive technologies. In some cases, policy-makers will also need to find ways to protect against the overuse of health services” [73].

*Human resources for health:* A health workforce that is capable and has good working attitude is an important requirement in a health system aiming to achieve UHC. The PHC system cannot complete its functions without trained and educated human resources who are well prepared and have the necessary conditions to enable them to serve for many years in the field of PHC.

WHO has reviewed the experience of many countries and come to the important conclusion that if there is no strong policy and leadership, then the health system cannot implement the goal and core values of PHC, namely healthy communities, health equity and universal access to people-centered care. Recent trends, such as hospital-centrism, unregulated, commercialization and fragmentation of service delivery divert health systems from initial good intentions and core values of PHC. (Figure 10) [71].



**Figure 10: The diversion of the health system from primary health care (PHC) core values**



Source: Adapted from World Health Report 2008 [71].

### Political determination and commitment

Universal coverage requires political determination and commitment of the Government and the participation of the entire society. It is impossible to achieve UHC if the effort comes only from the health sector, even when the health sector has political commitments from the highest levels of the Government. UHC requires active participation of the whole society, and requires efforts that are led at the national level, with close coordination from the Minister of Health and Minister of Finance [74].

## 2.2. Selection of health financing mechanism for universal health coverage

In order to achieve UHC the consideration, choice and development of health financing mechanisms must meet the following objectives:

- *Equity*: The contributions from households must be based on ability to pay and benefits must be based on medical need. “Equity” according to principles of commercial health insurance (i.e. larger contribution obtains greater benefits, smaller contribution receives fewer benefits; high probability of illness requires larger contributions while good health allows lower contributions) will impede access to health services among the poor, the elderly and high disease-risk groups;
- *Financial protection*: Pre-payment into pooled fund (through tax revenues in government budget or social health insurance schemes) in order to achieve risk pooling, to avoid direct out-of-pocket payments when ill and prevent costs of treatment exceeding the household’s ability to pay;

- *Cost-effectiveness*: To ensure financial resources are used to purchase cost-effective services that meet the need of the majority and to minimize purchase of services that are not cost-effective, or extremely costly services reserved for only very few cases;
- *Coverage of the informal employment sector*: Tax-based financing (government budget) to cover the informal sector plays a determining role in the success of achieving UHC. Experience in developing countries indicates that reliance on a social insurance mechanism to cover the informal sector is seldom successful.

Public health financing mechanisms, including tax-based financing (i.e. government budget) and social insurance-based health financing, are appropriate mechanisms for moving towards the objectives of UHC. They both ensure the principle of (i) compulsory financial contribution for health care based on individual or household ability to pay (pre-payment according to ability to pay) and (ii) access to health services regardless of the amount of money contributed.

The two financing mechanisms mentioned above help the people to avoid paying out of pocket or to limit payments to an amount they can afford to pay when using healthcare services. Thus the people are protected from both the risk of impoverishment due to direct out-of-pocket payments that exceed the ability to pay and financial barriers that inhibit them from seeking medical services. In public financing mechanisms for health, the principles of pre-payment, equitable pooling of financial resources, limited direct payment at the time health care services are used (which is known to lead to catastrophic health spending or impoverishment due to health spending) are fundamental to achieving UHC [75].

### **Role of tax-based financing (government budget) in UHC**

In order to achieve success in UHC, the public financing mechanisms mentioned earlier (tax-based or social insurance-based) should be the main source of funding, with tax revenues (government budget) having the most important role. Developed countries also use government budget to pay for health services used by people unable to afford care. In order to cover the informal sector, low- and middle-income countries need to rely even more on government budget funding. Implementing UHC in these countries means moving away from the idea that universal coverage can be achieved by relying solely or even largely on social health insurance [76].

Experience shows that no country in the world has the ability to ensure access to all medical services, yet all countries can increase financial resources for health if they so desire [72]. In order to increase financial resources for health, the government can prioritize state budget allocations to health, more effectively collect taxes and social insurance contributions and increase financial resources for health from new revenue sources, such as special consumption taxes imposed on alcohol and tobacco.

### **Commercial health insurance is not a good choice for the UHC objective**

In the process of debating health financing policy development in Vietnam, some have proposed that the health insurance model should be designed based on the principle of voluntary participation, size of benefits linked to size of contribution, facilitating access to higher quality health services by those who are able to pay more. Such a health insurance scheme is typical of commercial schemes, in which low-income groups are not able to afford the high premiums to obtain financial protection when they need costly healthcare services.

International experience indicates that no countries have achieved universal coverage by relying solely on voluntary health insurance schemes or commercial health insurance

schemes as the main financing mechanism. Commercial health insurance is not recognized as being equitable and could not meet the financial protection principles of UHC.

### Strategic purchasing with UHC

Properly implementing the purchasing function of health financing can contribute in an important way to ensuring effectiveness and sustainability of health financing in the UHC scheme. This function can be effectively implemented through *strategic purchasing* with the objective of strengthening efficiency of the health system through effective allocation of financial resources towards providers according to the following three key principles [77]:

- Selection of services that meet the people's needs and expectations following the principle of cost-effectiveness and suitability with national health system priorities. A necessary task of strategic purchasing is development of lists of medicines and health services based on evidence of cost-effectiveness and health technology assessments.
- Selection of provider payment methods aimed at encouraging the most effective use of financial resources. Using price levels as a way to encourage provision of priority services and limit provision of unnecessary services induced under fee-for-service payments or case mix payments
- Selection of service providers based on their quality and effectiveness.

Proper implementation of strategic purchasing requires capacity, transparency and political determination in management and implementation. Strategic purchasing must rely on evidence from cost-effectiveness studies and health technology assessments. In the process of striving for universal coverage, research is not a luxury, but rather the foundation to identify, develop and provide services for the health of the people [78].

### 3. Experience of UHC from selected developing countries in the region

Among middle-income countries in the Western Pacific region, two have achieved UHC – Malaysia and Thailand. To reform the health system to achieve UHC, both, but especially Thailand, closely coordinated actions of policy makers (politicians) who provided funding and highly experienced experts (technocrats). The experts played their role in initiating and advocating for the policy. After policies were issued, follow-up research and assessments were conducted to provide evidence for continued implementation of policies. This contributed to Thailand's pioneering status in UHC for middle-income countries. Taking advantage of intellectual strength, political decisiveness and social advocacy constituted the three angles of the "triangle that moves the mountain" that has brought Thailand success in development and implementation of the UHC policy.

*To develop the health service delivery system*, Thailand consolidated and renovated the PHC system. In 2001, Thailand restructured the PHC system, adopting the main strategy of effective implementation of PHC to achieve goals of equity in access to services, effectiveness in provision of services and focusing on health education and communication and preventive care. Contracting units for primary care were established and contracted with the National Health Security Office (NHSO) to provide primary care services for those who registered. The PHC delivery capacity was reinforced through family doctor training and appropriate remuneration for primary care health workers. Lists of medicines and technical services and technologies were set up and selected for use by the people based on cost-effectiveness assessments. Experience from Thailand on its selection of healthcare services was mentioned in the World Health Report 2013. Research evidence helped Thailand to choose for its cervical cancer control strategy to rely on classic cancer screening technology

(combination of visual inspection with acetic acid and pap smears depending on age group) instead of using the HPV vaccination, which would have cost 10 times as much.

*Financing mechanism:* Malaysia chose to rely on a *tax-based financing scheme*. With this choice, Malaysia became the first middle-income country in the region to achieve UHC. Thailand combined both tax-based and social health insurance based schemes after many decades of unsuccessful efforts to implement UHC through various health insurance programs for the informal sector (health insurance for the poor, for children, for the elderly, for farmers,... with state budget subsidies to buy health insurance). From 2001, Thailand decided to halt all insurance programs for the informal sector and switch to a tax-based financing mechanism. Results are that 70 per cent of the Thai population (all 48 million people in the informal sector) are benefitting from tax-based financing for their health care. For the formal employment sector, Thailand continues to maintain a program for civil servants separate from a program for workers in enterprises. With the health financing reforms mentioned above, Thailand has become the second middle income country in the region (after Malaysia) to implement universal coverage.

China, has recently announced that they have achieved 95 per cent population coverage of health insurance thanks to major contributions from the government budget. The three health insurance schemes in China include health insurance for the formal employment sector, health insurance for the informal employment sector in urban areas and a rural health insurance scheme called the New Cooperative Medical Scheme (NCMS). More than 80 per cent of the premiums contributed for the rural population come from central and local government budgets. The government budget plays the determining role in the coverage of 98.5 per cent of the rural population in China. However, the achievement of China is limited to population coverage, while financial protection remains unresolved, resulting in a large percentage of households experiencing high health spending and impoverishment due to healthcare costs.

Hence, the experience gained in middle-income countries in the region with UHC shows that the government budget is the main financing source for overcoming the challenge of covering the informal sector, which is characterized by unstable income and unwillingness to enroll in voluntary health insurance schemes without support from the government.

#### **4. Vietnamese policies on UHC**

In Vietnam, the people's right to health care was laid out in the 1992 Constitution. The Vietnamese perspective on equity in health care was stated in Politburo Resolution No. 46/NQ-TW (2005): "Health is the most precious asset of every person and of the entire society. Develop universal health insurance to gradually achieve equity in health care, to implement sharing of risks between the healthy and the ill, the rich and the poor, the working age people and children; and achieve equity in remuneration of health workers" [79]. The general objective of developing the health system up to 2015 is stated as: "Continue to develop the health system of Vietnam towards equity, efficiency and development; strengthen health service quality to meet the increasing and diverse needs of the people for health protection, care and promotion; reduce morbidity and mortality and increase life expectancy" [80].

Although current policies of Vietnam do not fully and comprehensively mention the contents of UHC in the three dimensions of population coverage, service coverage and financial protection, in reality, the government budget has ensured financial resources for preventive medicine, public health activities, national health target programs, and has implemented universal coverage of preventive medicine over many years. Financing for

curative care through health insurance started with a Decree on health insurance regulations in 1992. The Law on Health Insurance (2008) set out the roadmap for universal coverage by 2014. The government created a policy of supporting 100 per cent of the premium for selected prioritized groups, including the poor, while increasing the subsidy for the near poor from 50 per cent to 70 per cent.

The project on implementing the roadmap towards universal health insurance in the period 2012–2015 and 2020 recently approved by the Prime Minister [81] reset the target for UHC to coverage of at least 80 per cent of the population by 2020 [20]. Nevertheless, the roadmap for implementing universal health insurance coverage according to the Law on Health Insurance only focuses on population coverage, and does not mention the other two dimensions of UHC. Policies and regulations on service coverage, quality of services and financial protection for the people are under discussion with plans to amend the Law on Health Insurance and related documents.

### 5. Indicators of universal health coverage

In order to monitor and evaluate progress in implementing the goal of UHC, linked with progress in implementing the MDGs, WHO has introduced 26 indicators, which have been categorized into the four groups below [82]. These indicators need to be fully considered, because they reflect the tasks and major goals of the process towards UHC.

- *Coverage of MDG-related healthcare services, such as:* Proportion of 1 year old children immunized against measles; proportion of births attended by skilled health personnel; contraceptive prevalence rate among married women; antenatal care coverage (at least one visit; at least four visits); unmet need for family planning; condom use at last high-risk sex among 15–24 year old women/men; proportion of male/female population aged 15–24 years with comprehensive correct knowledge of HIV/AIDS; proportion of population with advanced HIV infection with access to ARV drugs; proportion of children under age 5 sleeping under insecticide-treated bed nets; proportion of children under age 5 with fever who are treated with appropriate anti-malarial drugs; proportion of tuberculosis cases detected and cured under DOTS; proportion of population with access to affordable essential drugs on a sustainable basis.
- *Health outcomes associated with MDG targets, such as:* Prevalence of underweight children under age 5; U5MR; IMR; MMR; adolescent birth rate; incidence, prevalence and death rates associated with tuberculosis; HIV prevalence among the population aged 15–49 years; incidence/death rates associated with malaria.
- *Financial risk protection indicators, such as:* Incidence of catastrophic health expenditure due to out-of-pocket payments; incidence of impoverishment due to out-of-pocket payments.
- *Selected health system determinants of health service coverage, such as:* The number of all types of health workers per population (usually per 10 000 people), and their geographic distribution; the number of hospital beds per population and their geographic distribution; the percentage of population within one hour (or 5 kilometers) travel of a PHC facility; availability of essential medicines.

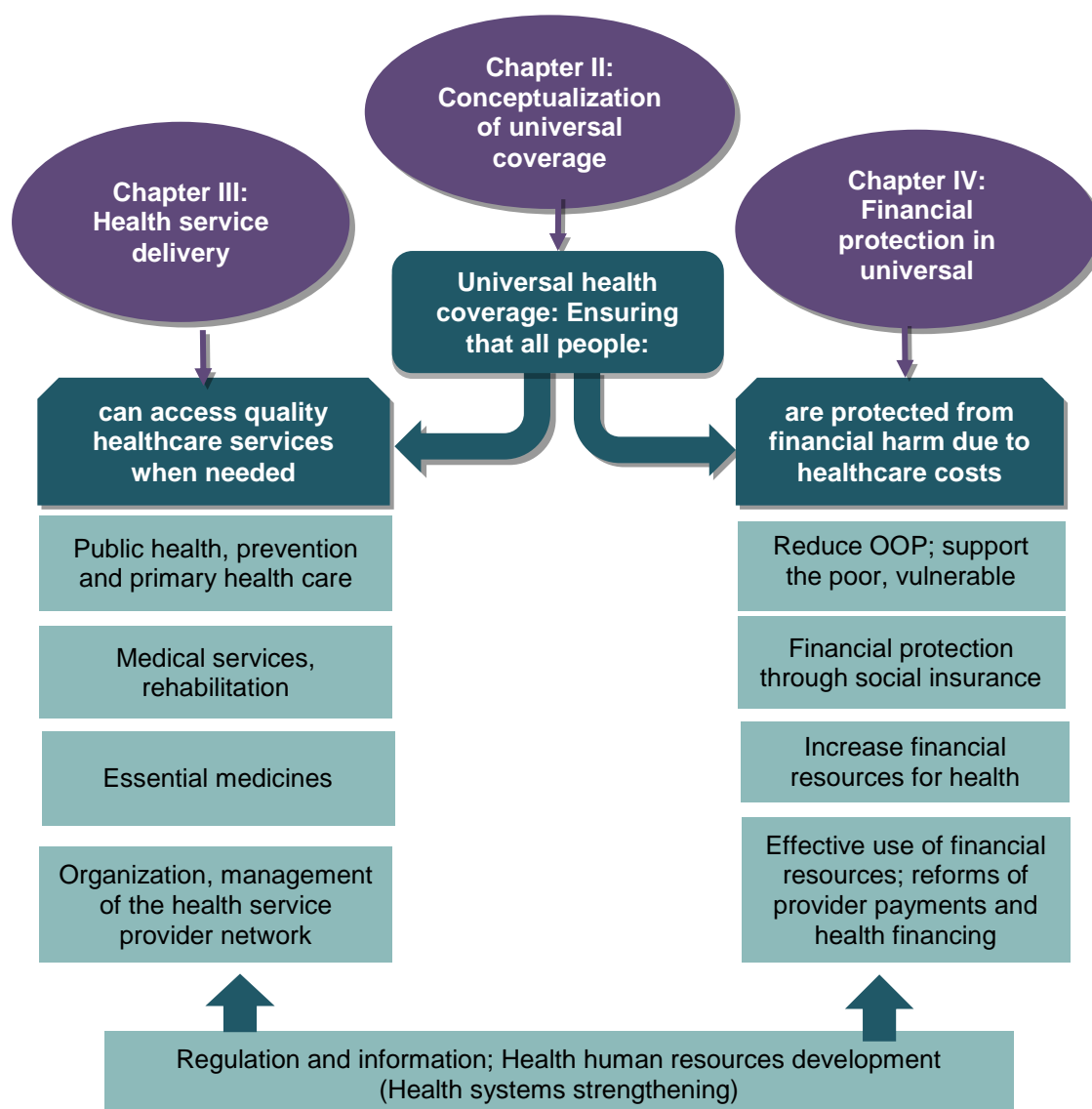
### 6. Analytical framework used in the report

The analytical framework used in the chapters on UHC in this report are structured based on the three dimensions of the objectives of UHC (population coverage, health service

coverage and financial protection) and are structured based on the conceptualization of the basic objectives of UHC, namely: **Ensuring that all people** (not just a part of the population): (i) **can access quality health services** when needed and (ii) are **protected against financial harm** due to healthcare costs (Figure 11).

When analyzing the situation and making recommendations, the report will focus on the perspective that the achievement of UHC should be supported by a properly functioning health system that ensures easy access to the population and a dominant role taken by the government.

**Figure 11: Analytical framework used in the Report**





## Chapter III: Healthcare service coverage

This chapter discusses the Vietnamese healthcare service delivery situation, with emphasis on basic health services, assessment of achievements and problems to be resolved in order to ensure that all people can access quality basic healthcare services when needed. The main contents covered and assessed includes: (i) Coverage of preventive medicine, PHC reproductive health and population-family planning services; (ii) Coverage of medical services; (iii) Access to essential medicines to implement UHC.

### 1. Concepts and policy orientation

#### 1.1. Concepts

UHC implies ensuring that all people can access medical services of adequate quality to be effective in health promotion, disease prevention and treatment and rehabilitation as needed, and at the same time ensuring that use of these services does not cause financial difficulty to households.

Health service coverage is the probability of receiving a necessary health intervention conditional on the presence of a health care need [83]. Health service coverage does not merely refer to health service delivery, but rather to the entire process, from allocation of resources to performance on assigned targets. Health service coverage should be comprehensively measured from many different aspects, including availability of staff, supplies and facilities; geographic accessibility; acceptability by users as determined by cost and other demand side factors; actual use of the services by the target population and effectiveness coverage determined by the quality of services provided [84]. More concretely, it is necessary to assess the following questions: (i) Do the services reach the people (ability to use services, geographic access, financial affordability); (ii) Which services (appropriate, effective); and (iii) How are the services provided (efficiently, continuously, in a way that is satisfactory to the users). The measure of coverage indicates the interaction between offered health services and target beneficiaries of these services. In order to implement health service coverage, many countries have prioritized development of basic health services or primary health services [85].

*Basic health services* (also known as essential health services, minimum set of health services or benefit package) are developed with the objective of focusing limited resources on health services that could achieve the highest returns to the investment. Basic health services are a minimum set of services determined on the basis of the priorities of the health care system of a country. This service package is expected to ensure achievement of equity targets and improvement in productivity and effectiveness of medical care activities [86]. Basic health services are usually determined based on a number of specific criteria such as cost-effectiveness of services and interventions, the burden of disease, the availability of resources...., and consensus decisions among stakeholders including policy makers, service providers and the whole society [87].

Although what is determined to be basic health services differs across countries depending on socio-economic and epidemiological conditions, it is recommended that basic health care includes both public health and clinical services. Public health services need to put an emphasis on services that promote changes in people's behavior (such as health education and communication programs), and environmental risk control (such as mosquito spraying programs to control malaria), and preventive medicine services such as the expanded program on immunization, maternal and child health care, disease screening, use of

drugs to prevent some diseases and manage chronic disease). Basic clinical services are typically PHC services or services that are determined specifically for each level of the health services network based on the diagnosis and treatment capacity of different types of health care facilities (polyclinics, health centers, district hospitals and higher level hospitals receiving referred patients). Thus, basic health services mainly consist of primary care services and national health target programs. In low and lower middle income countries, basic health services are usually provided as PHC at the commune and district levels.

It must be noted that designing and implementing a basic healthcare package *is not an appropriate solution under conditions of weak management*. It requires political commitment and institutions, decisions on financial allocation and organization of the health service network, development of essential medicines lists, training and deployment of health workers and development of the health information system [86].

*Preventive medicine, public health and PHC* share the objectives of health promotion, improving quality of life and minimizing community risks of disease, not only communicable diseases and malnutrition, but also chronic diseases such as cardio-vascular disease, diabetes, hypertension, and cancer, etc. Investments in preventive medicine, public health and PHC are seen as effective ways to improve community health at low cost and the optimal way to achieve UHC.

*Public health* consists of a combination of activities to prevent disease, extend life expectancy, and strengthen health of the people through organized efforts of the community. Public health emphasizes health improvements and strengthening at the population or community level, and requires the participation and efforts of individuals, organizations, the community and all of society under the general leadership of the Government. Public health is multidisciplinary in nature, involving primarily expertise in epidemiology, biostatistics, environmental sciences, health behavior, nutrition, health management, and other fields [88, 89]. Public health activities rely on monitoring, diagnosis, analysis of health problems in the community, from which can be determined appropriate interventions for disease prevention, health information and education to encourage healthy lifestyles and promotion of other activities to strengthen health.

*Preventive medicine* includes preventive interventions aimed at protecting, strengthening and maintaining health and quality of life, preventing disease, disability and premature death for individuals or specific groups in the community [90]. Preventive medicine, combined with public health efforts to upgrade infrastructure, (such as improving environmental and housing conditions, supply of clean water and sanitary facilities), apply epidemiological methods, prioritize epidemic prevention, and focus on the poor and population groups with special healthcare needs constitutes a shift towards the public health approach with multi-sectoral participation and higher participation of society.

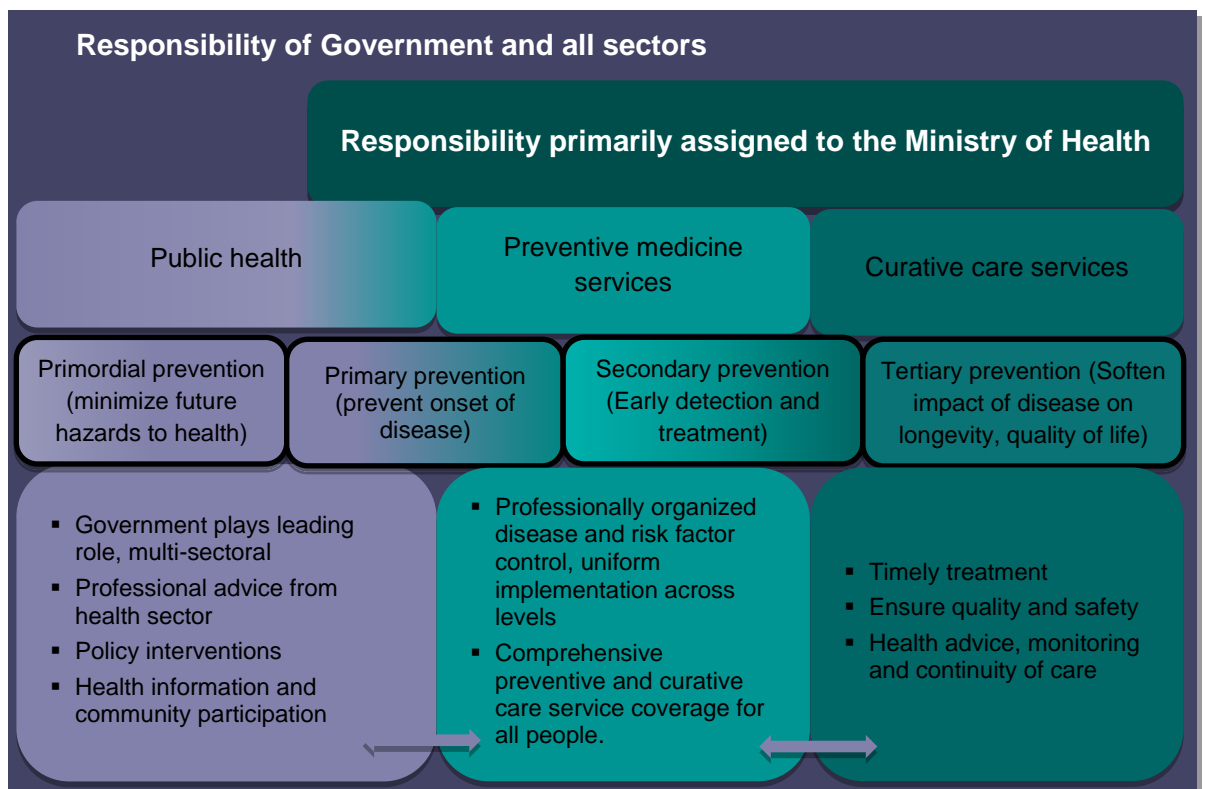
*Primary health care* has been defined as “essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination” [91]. The modern perspective on PHC [71] emphasizes health system reforms to ensure universal accessibility, extension of scope to cover all health risks and diseases, more appropriate investment, and integration of preventive and curative care. This contrasts with the traditional view of PHC with its emphasis on access to only a basic health intervention package and essential medicines for the poor limited largely to communicable and acute diseases, focus on mother and child healthcare and viewed to some extent as the antithesis of hospital care, etc.

Nevertheless, PHC is still considered as the primary contact point of the population with the health system, and a primary factor required in the process of striving for UHC.

Preventive medicine, public health and PHC all place disease prevention at the core of health care, despite differences in the extent and scope of approaches. PHC focuses more on direct first level comprehensive healthcare and health promotion for the people. Public health has a broader scope, not limited to individual-level interventions but with emphasis on disease prevention and health promotion for the entire community. Both PHC and public health approaches are inter-sectoral and require strong commitment and participation of the government, multiple sectors, local authorities and the community as compared with the preventive medicine approach.

From the perspective of the organization and management of health service delivery, activities related to preventive medicine and PHC should cover all levels of prevention, from eliminating risk factors to preventing disability or death. Hence, preventive medicine activities should include service delivery activities in the field of public health, preventive medicine services to prevent disease (including communicable and non-communicable disease) and early treatment to prevent severe disease, disability or death (Figure 12).

**Figure 12: Preventive care from service delivery management approach**



## 1.2. Policy orientation for basic health service delivery

The United Nations General Assembly recently pointed out that effective and financially sustainable implementation of UHC requires a health care system that is “*resilient and response*” and that “*provides comprehensive primary health-care services*”, and ensures “*all people have access, without discrimination, to nationally determined sets of the promotive, preventive, curative and rehabilitative basic health services needed and essential, safe, affordable, effective and quality medicines while ensuring that the use of these services does not expose the users to financial hardship, with a special emphasis on the poor, vulnerable and marginalized segments of the population*” [70].

Thus, in order to achieve the goal of UHC, the determination of what constitutes basic health services is necessary to confirm the health care priorities of the country in the current context of limited resources. These essential health services should be selected based on the consolidation of services to be provided in a comprehensive and integrated manner, based on a PHC approach [74].

Resolution No. 15-NQ/TW dated 1 June 2012 and issued in the 5th plenum of the 11th Central Committee on social policy issues for the period 2012–2020 specifies the objective of “*Ensuring minimum health care*”, including some contents related to basic health services namely: improve health care for people at the grassroots level, prioritize poor districts and communes, isolated, remote regions, and areas inhabited by ethnic minorities; improve the quality of mother and child health care; by 2020, fully immunize over 90 per cent of children under 1 year of age; reduce the proportion underweight among children under age five to below 10 per cent; strengthen the implementation of the National tuberculosis prevention and control program...

The National strategy for the protection, care and promotion of the people’s health for the period 2011–2020, vision to 2030, approved by the Prime Minister in Decision No. 122/QĐ-TTg, has a similar standpoint, stated as: “*Reform and refine the Vietnamese health system towards equity, efficiency and development; ensure access to basic health services for all citizens, especially the poor, ethnic minorities, children under age six, beneficiaries of social policies, residents in disadvantaged, isolated and remote areas, border, island and coastal areas, and other vulnerable groups.*”

## 2. Coverage of preventive medicine, PHC, reproductive health and population-family planning services

### 2.1. Situation assessment

Below is an assessment of PHC, preventive medicine, population and family planning service delivery, aimed at identifying priority issues and proposing solutions for improving activities in this area to meet the goal of UHC.

#### 2.1.1. Organization of the preventive medicine network

##### Achievements and progress

The organization of the preventive medicine network in most localities is stable. All provinces have provincial preventive medicine centers, and 15 out of 63 have reached national standards [92]. At the provincial level, 63 health communication and education centers, 63 population and family planning centers and 62 HIV/AIDS control centers have been established [93]. Some 20 provinces have food safety administration offices [94], among which 16 have food safety laboratories that meet ISO 17025 standards [95]. The

curative care sector also has facilities with important roles in preventive medicine such as 46 tuberculosis hospitals, 33 mental hospitals and a number of endocrinology hospitals that have been built or renovated on the basis of facilities formerly part of the preventive medicine system. In addition, some provinces have provincial endocrinology centers, social disease control centers, tuberculosis control centers and a few other specialized facilities.

At the district level, most provinces have implemented Joint Circular No. 03/2008/TTLT-BYT-BNV and established district health centers performing the function of preventive medicine at the district level. Some 59 out of 63 provinces have delegated the provincial health bureaus to directly manage district health centers, 55 out of 63 provinces have assigned district health centers to manage commune health stations, 63 provinces have established the provincial department of population - family planning and 62 out of 63 provinces have district population - family planning centers according to Joint Circular No. 05/2008/TTLB-BYT-BNV [96].

Implementation of Prime Ministerial Decision No. 1402/QĐ-TTg on the project “Supporting the Development of District preventive medicine centers for the period 2007–2010” has strengthened district preventive medicine centers (now referred to as district health centers) in terms of infrastructure and equipment investments and ensuring that at least 15 per cent of staff have university or higher qualifications and over 80 per cent of staff have had either short or long-term training in preventive medicine.

At the commune level in 2012, 100 per cent of communes and more than 96.6 per cent of rural villages were served by village health workers, 76.0 per cent of communes were served by a doctor; 93.4 per cent of commune health stations were served by an obstetrics/pediatrics assistant doctor or midwife; in remote and ethnic villages, more than 1200 village-based ethnic minority midwives have been trained and their use institutionalized in the health system according to Circular 07/2013/TT-BYT; 74.1 per cent of communes met national standards for commune health or the new national benchmarks for commune health<sup>4</sup> and about 78.8 per cent of commune health stations were providing health services reimbursed by health insurance [12].

Implementation of the project on population control in islands and coastal areas for the period 2009–2020 has begun [35]. At the district level some 169 reproductive health care-family planning teams have been set up. The provincial counseling centers and reproductive health centers have set up 19 mobile teams [36].

In 2013, the Government issued Decision No. 317/2013/QĐ-TTg approving the Project on health development for islands and coastal areas by 2020 with the aim of strengthening the capacity for health service delivery and improving knowledge and skills of the people living and working on islands to protect their own health, provide first aid, care for and transport victims of accidents to the nearest health facilities (See details in Chapter I, Section 2.6).

National health target programs continue to receive financial investment from the state budget. The implementation of Decree No. 43/2006/ND-CP of the Government regulating autonomy and accountability for task performance, organizational structure, staffing and financing of public service units has encouraged preventive medicine centers at provincial and district level to expand preventive service delivery as well as to strengthen periodic medical check-ups and occupational health care.

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<sup>4</sup> In 2010 the proportion of communes meeting national health benchmarks overall reached 80.1 per cent. In 2011 and 2012 new commune health benchmarks were applied, but because of inconsistency in which benchmarks are used for reporting on attainment, it is not yet possible to assess the proportion meeting new commune health benchmarks.



## **Difficulties and shortcomings**

The organization of grassroots health care (district and commune levels) is inappropriate, causing difficulties for management and provision of preventive medicine and PHC, particularly due to the continued division between curative and preventive functions in administration and service delivery [23].

Grassroots units are the main PHC providers and the people's first point of contact with the health system, yet there is a lack of linkages between these facilities and higher level facilities in ensuring continuity and comprehensiveness of health care, especially for the management and treatment of patients with non-communicable disease. Health facilities cannot implement their gatekeeping role to coordinate referrals and limit bypassing because of limitations in their capacity to provide professional medical services and the population's desire to seek medical care at higher levels.

Conditions to support PHC implementation at district and commune levels have many limitations. Knowledge and practical experience of health workers is limited [23]; there is a shortage of qualified health care workers (especially medical doctors), while it is very difficult to recruit new staff (many district hospitals have been unable to recruit doctors for several years) because of the lack of motivating factors (heavy workload, remuneration inadequate for workload, few opportunities for training) [38] (See details in Chapter I, Section 2.2.2). Medical equipment is insufficient, not even meeting the basic requirements set by the Ministry of Health. These problems have negatively affected the ability to implement universal healthcare coverage.

Funds are inadequate to meet the operating costs; the mechanism for allocating funds does not encourage greater performance from medical facilities, nor ensure the provision of basic health services. State budget funds cover only 10–20 per cent of operating costs at district hospitals [22]. Funds for operating commune health stations are less than the minimum amount of 10 million VND per year stipulated in Joint Circular No. 119/2002/TTLT-BYT-BTC [23]. Allocation of state budget to health facilities is not based on their performance, but rather on input-based norms (number of beds, number of permanent staff) and historical costs, so the amounts are not only inadequate for meeting the healthcare needs but also do not encourage health facilities to provide services efficiently.

National Target Programs are managed and funds allocated in a vertical manner, leading to fragmentation, duplication, waste of resources and administrative overload for commune health workers [47, 97]. Donor support for the population and family planning program has been dramatically reduced, and requires substantial financial investments from the Government budget to replace it. Vulnerable groups, ethnic minorities, people living with disabilities, people living with HIV/AIDS, especially young and unmarried people, have high demand for contraception and family planning that is currently not being adequately met by services due to lack of attention from the national programs.

### **2.1.2. Disease control and National health target programs**

#### **Achievements and progress**

##### *Communicable disease control programs*

Dangerous communicable diseases in the scope of Project 1 and the Expanded program on immunizations belonging to Project 2 of the National health target program for the period 2012–2015 have been effectively controlled (See Chapter I, Section 2.6.1).



*The National tuberculosis control program:* The incidence of tuberculosis has been reduced over time. The National tuberculosis control program covers 100 per cent of the country including activities in diagnosing tuberculosis in children, applying 8 months of DOTS following the first protocol for new tuberculosis patients achieving cure rates for AFB+ patients at 91.1 per cent and with the second protocol for recurrences of tuberculosis and treatment failure with a cure rate of 80 per cent.

*The HIV/AIDS control program:* The incidence and mortality from HIV/AIDS has fallen each year from 2008 (See details in Chapter I, Section 2.6). Voluntary HIV testing and counseling has been expanded to 485 counseling clinics in 63 provinces and 84 HIV testing sites authorized to confirm HIV positive cases in 54 provinces with nearly 2 million people provided HIV testing and counseling for free each year. The program to distribute free condoms is being implemented in 63 provinces and free needles in 88 per cent of all provinces. ARV treatment is being provided to some 69 882 people with advanced HIV infections and methadone replacement therapy is being provided to about 11 000 people in 14 provinces. Nationally there are 226 units providing services for prevention of HIV transmission from mother to child; they have provided HIV testing and counseling services to 42 per cent of pregnant women. Treatment to prevent mother to child transmission of HIV is being implemented early, from the 14 week of pregnancy for about 94 per cent of pregnant women who tested positive for HIV in 2012.

#### ***Non-communicable disease program***

Non-communicable disease control programs have begun to be implemented and continue to be expanded to many provinces (See details on results in Chapter I, Section 2.6). Disease control program activities have achieved some initial good results compared to plan targets. Particularly, the programs have focused on activities to develop the organization of disease control networks, train program health staff, implement communication activities and screen the population to identify and manage patients. However, up till now, only the diabetes control program has national coverage of its network all the way down to the district level, while the hypertension program, blindness prevention program, and COPD control program are still only implemented in a few focal provinces. Health worker training and health education and communication activities of these programs are being implemented effectively, but do not yet reach all health workers who participate in implementing the programs at the district and commune levels.

Implementation of the National Strategy for Food Safety for the period 2011–2020 and vision to 2030 according to Prime Ministerial Decision No. 20/2012/QĐ-TTg has yielded some initial positive achievements, namely: (i) reduced mass food poisoning incidents and food poisoning cases [95]; (ii) developed national technical standards, issued 50 national technical standards on food safety and submitted for approval an additional 35 Vietnam-specific standards on testing methods; (iii) set up multi-sectoral steering committees at the provincial level (100 per cent), district and commune levels (99 per cent); (iv) organized international proficiency testing programs for national, regional and provincial laboratories; and (v) developed the system for certifying conformance with standards at two units: the Center for Food Safety Application and the National Institute for Food Control.

#### ***Population - family planning, reproductive health and nutrition***

Population-family planning and reproductive health services are available in almost all localities throughout the country. The number of pregnant women receiving antenatal screening and babies receiving newborn screening have exceeded the 2012 plan targets. The

total number of new contraceptive users reached 100 per cent of the 2012 plan while the contraceptive prevalence rate reached 76.2 per cent.

Project No. 52 on population control in marine, island and coastal areas for the period 2009–2020 [35] has been implemented in 151 districts in 28 coastal provinces [36]. In 2012, the Prime Minister issued Decision No. 1199/QĐ-TTg approving the National population and family planning target program for the period 2012–2015 with the overall goal of actively maintaining an appropriately low fertility level so the population can stabilize at about 115–120 million people by the middle of the 21<sup>st</sup> century, with activities focused on reducing fertility in high fertility regions, in mountainous, remote, isolated and disadvantaged areas, and maintain fertility levels in regions with already low fertility. The Program aims to control the rapid increase in the sex ratio at birth; improve the quality of the population in terms of physical health, to meet the need for quality human resources to serve industrialization, modernization and rapid, sustainable development of the country; expand antenatal and newborn screening and diagnosis, provide premarital examinations and counseling, and other interventions to reduce the risk of declines in population quality and numbers. Total investment for implementing this Program is 8.99 trillion VND.

Activities in the Project on reproductive health and improvement of child nutrition have been implemented in 55 provinces, of which 37 provinces are focal areas for implementing reproductive health activities. In 2012 achievement of targets was higher than in 2011, including: the proportion of pregnant women whose pregnancy was managed (96.4 per cent), the proportion of women giving birth who had 3 or more antenatal visits over 3 trimesters (89.4 per cent), the proportion of women giving birth who were assisted by a medical worker (97.9 per cent), the proportion of mothers given postpartum care at home (87.3 per cent). The abortion ratio declined from 27 per 100 live births to below 19. The malnutrition rate of children under age 5 (underweight) in 2012 is estimated at 16.2 per cent, a 0.6 percentage point decline compared to 2011, and the proportion of children aged 6 to 30 months who took Vitamin A reached 95 per cent, exceeding the National Assembly goal [53]. Currently the Ministry of Health is developing a minimum package of reproductive health, maternal, neonatal and child health, nutrition, water and sanitation services to submit for approval in 2013.

#### *Interventions to promote health and minimize harm from tobacco and alcohol use*

In 2012 the Law on Tobacco Control was approved by the National Assembly [51], and came into effect as of 1 May 2013. The Government issued Decision No. 229/QĐ-TTg dated 25 January 2013 approving the “National Strategy for tobacco control to 2020”, in which the Ministry of Health has been assigned the task of standing agency, with responsibility for organizing and coordinating implementation of programs, multi-sectoral plans for tobacco control nationwide. The Standing office of the Tobacco control program is located at the Ministry of Health and has responsibility to assist the Program chairman to organize implementation of the plan to implement the Framework Convention and other plans for tobacco control. On 17 July 2013, the Government issued Decree No. 77/2013/NĐ-CP providing detailed guidance for implementing the Law on Tobacco control. The Ministry of Health is finalizing the draft Law on Alcohol Abuse Control in order to include it in the law-making agenda of the National Assembly.

#### *Health environmental management and occupational health*

The Health Environmental Management Administration has begun implementation of the Master project on treatment of medical waste for the period 2011–2015 with an orientation towards 2020 according to Prime Ministerial Decision 2038/QĐ-TTg dated 15

November 2011. The agency continues to implement environmental protection tasks in the health sector, communication for the patriotic sanitation campaign to improve the people's health, the National target program on rural water and sanitation, the national program on occupational hygiene and safety, surveys and statistical reporting on injuries and accidents, implementation of the project to control occupational disease and care for the health of workers and guide licensing of the transport of dangerous goods including insecticides and antiseptics used in the medical field and households.

### **Difficulties and shortcomings**

Geographic differentials persist in maternal and child health, population and family planning indicators, such as the MMR, infant mortality rate (IMR) and U5MR and child malnutrition rate. Mountainous and disadvantaged regions have high fertility and low contraceptive prevalence, and do not yet meet plan targets. In these regions, many people still do not come to utilize services provided by health facilities, especially by commune health stations. Utilization of reproductive health services among young, unmarried, especially migrant populations is low, despite clear needs. Refresher training for health workers at the grassroots level is not regularly provided due to shortage of budget.

Major changes in morbidity patterns, particularly an increased share of non-communicable diseases, accidents and injuries in burden of disease as the burden from communicable diseases declines. This situation is exacerbated by the appearance of newly emerging diseases and risk of resurgence of some communicable diseases that are difficult to control. At the same time, investments in control of non-communicable disease are not proportional to their burden of disease, disease risk factors are not yet managed, screening to detect cases for monitoring and management has not yet been implemented widely and is not yet truly cost-effective [46, 47, 49, 98].

There is no single national-level agency for management and coordination of disease control and PHC. The organization of preventive medicine at the grassroots level has shortcomings and is not integrated with curative care work, while national health target programs are managed vertically in a fragmented manner, lacking coordination and integration [47]. There is also no unified information system for monitoring, and there are limitations in capacity for data processing, monitoring and use of information in forecasting and planning at all levels. These problems cause difficulty for management and leadership and result in reduced effectiveness of preventive medicine and PHC.

The capacity of grassroots health care units to provide services remains limited both in quantity and quality of services because of the lack of resources invested in physical facilities, medical equipment and recurrent operating budgets. Human resources are insufficient (difficult to recruit people) [38] and weak (knowledge, limited practical skills) [23]. At the same time policies to attract health workers have not yet proven effective, while the referral mechanism and provider payment policies are not yet appropriate, thus discouraging provision of services at the grassroots level.

There is no policy framework for the participation of the private sector in providing PHC, health management and health counseling, despite the continued development of the private healthcare network and the increasing trend population use of private health services.

The greatest limitation of non-communicable disease control programs is the slow scaling up and non-achievement of targets for expanding screening for early detection and management of patients. Currently screening components of disease control programs are only being implemented in a limited number of localities and communes. There is a lack of integration with health facilities (continuity across levels, and between preventive and

curative care fields) for the detection and monitoring of patients in risk groups and patients whose disease has been detected at curative care facilities, so the screening of people for disease is not cost-effective [46, 47, 49, 98].

Interventions aimed at health promotion in the community through tobacco control and alcohol abuse programs, clean water and sanitation, behavior and lifestyle change have not yet been implemented consistently because of the lack of regulatory documents, and guidance. In addition, there has not yet been any clear assignment of responsibility or activities for collaboration and integration between sectors and different levels of authorities.

School health programs lack appropriate levels of investments and have not yet achieved their targets, with 50 per cent of schools lacking staff responsible for school health and 40–50 percent of schools not meeting school hygiene standards, particularly for toilets [52].

On population control: In 2012 (a Dragon year consider auspicious), there was an increase in the crude birth rate of 0.3 births per 1000 population compared to 2011 (from 16.6‰ to 16.9‰) [55], which means that the plan goal of reducing fertility by 0.1 births per 1000 population was not met. Although the sex ratio at birth in 2012 increased compared to 2011, the amount of the increase, at 0.4, is lower than the increase of 0.7 between 2010 and 2011.

## 2.2. Priority issues

- Activities in disease control and risk factor control are not yet managed in a unified way, and have received investments that are not in line with the disease burden or assessment of intervention cost-effectiveness.
- The organization, management and delivery of preventive medicine services exhibit many shortcomings. Integration between health programs, between preventive and curative care units and between units at different levels of the health system in provision is inadequate to ensure comprehensive and continuous PHC from prevention of risk factors to control of adverse events and mortality from disease.
- Capacity for service delivery of preventive medicine facilities and PHC units remains limited because of the lack of state budget investment in infrastructure, equipment and human resources (both in quantities and professional competencies), appropriate financing mechanisms and appropriate legal provisions to encourage service provision at preventive medicine and PHC facilities.
- Interventions to improve the environment, limit risk factors and promote health to control disease have not yet received adequate attention, and particularly lack the active participation of authorities at all levels and sectors and in the community.
- Unmet need for reproductive health and family planning services is substantial, particularly for young, unmarried people, migrants, ethnic minorities and people living in disadvantaged areas. Financial and human resources training policies do not yet support necessary outreach activities to meet these needs.

## 2.3. Recommendations

To resolve the above priority problems, this Report proposes the following solutions:

### 2.3.1. Organize effective disease control activities and gradually move towards consistent management of risk factors for disease

#### *Short-term solutions*

- Strengthen the role and responsibility of the authorities at all levels, ministries sectors, and mass organizations, with advice from the health sector to direct and implement solutions to improve the environment, limit factors harmful to health, improve physical fitness and change lifestyle behavior that is detrimental to the health of the community.
- Develop a coordination and steering mechanism that is consistent across disease control programs and health programs, focus on developing mechanisms for integrating activities of disease control programs that have similar risk factors, such as behavior change communication (e.g. for hypertension, cardio-vascular disease, diabetes and other metabolic disorders; diseases spread by mosquitos; diseases spread through fecal oral route)
- Implement research to evaluate the system of gathering and processing information on disease control from different health programs, as well as from preventive and curative care subsectors, to serve as a basis to strengthen and develop more complete disease control information systems.
- Strengthen capacity of health sector units in providing advice for health sector planning and development of regulations and mechanisms for coordination, in order to garner the responsible participation of the authorities at all levels, all sectors and of the community for implementation of interventions to prevent health risk factors related to the environment, society, population change and disease vectors.

#### *Long-term solutions*

- Research options for modifying the organizational structure of national health program management for communicable and non-communicable disease with the orientation towards unifying the leadership and organization of service provision.
- Amend regulations aimed at reforming and clarifying the organizational structure and coordination mechanism between preventive medicine units, across levels of the system and with curative care units to coordinate implementation of disease control tasks and service provision. Review the centers for disease control (CDC) model for control of infectious disease and eventually develop and apply such a model for the whole community ensuring consistency and professionalism. Establish this model in parallel with restructuring and development of a comprehensive continuous curative and preventive care network that operates from the PHC to central level.
- Develop indicators, statistical reporting forms and mechanisms for collecting and processing information related to disease control; apply information technology to setting up a modern database, information management surveillance and analysis systems.



### **2.3.2. Design and deliver appropriate preventive care services related to selected diseases and disease factors at each level ; ensure integration across levels and between curative and preventive care**

#### *Short-term solutions*

- Implement research and assessments of different management forms for preventive medicine programs, preventive medicine units and curative care facilities to serve as the basis for developing a mechanism and form of coordination between preventive medicine units and curative care facilities at all levels for management and monitoring and treatment of patients that is comprehensive and continuous from prevention of risk factors to control of adverse events and disability, while ensuring that service delivery is continuous across all facilities providing care in both preventive and curative care facilities.
- Study and propose re-establishment of the referral system to ensure that the grassroots health units are the first point of contact when people seek medical care and the coordinating agency for curative care activities for the people in the healthcare system.
- Develop and implement a coordinating mechanism for activities between public and private sector health facilities in order to strengthen the role and integration of the private sector in provision of quality basic healthcare services.

#### *Long-term solutions*

- Reduce the number of units involved in management and steering for implementation of target programs for disease control at the provincial level and develop an integration mechanism for professional medical activities appropriate for different levels of the health system for ensuring continuity of health service delivery between preventive and curative care, among various preventive medicine service provider units and between units providing preventive medicine and curative care services at all levels. The delivery of PHC requires unified management and high level of integration.
- Strengthen commune health services to more effectively fulfill the role of the first point of service provision for all types of clients, and consider grassroots health services as the main focus for universal access to healthcare.

### **2.3.3. Improve preventive medicine service quality management systems**

#### *Short-term solutions*

- Evaluate the capacity and effectiveness of management and provision of preventive medicine and PHC services at provincial level preventive medicine units, commune health stations and national health target programs.
- Review and assess progress and effectiveness of policies and programs investing in preventive medicine and district and commune health services, including policies on training, attracting staff, deployment and retention of health workers, lists of drugs and medical equipment, and investments in physical infrastructure at commune health stations, district hospitals and health centers and national health target programs

#### *Long-term solutions*

- Develop policies for investment in human resources for preventive medicine and PHC services. This should include strengthening policies to attract and encourage health



workers in combination with policies on training human resources. The orientation should be towards deploying human resource from the localities themselves and providing training in knowledge that is appropriate with the professional needs for health care in the localities.

- Develop indicators, models and mechanisms for quality management and organizations to check and monitor quality to aid government agencies and health facilities to implement internal monitoring and surveillance of service quality.
- Reform the mechanism for budgeting and allocating funds and adjust the mechanism and norms for allocation of state budget funds for commune health stations that takes into account population size, health care needs and cost recovery potential in the locality. The allocation mechanism should be at least partly based on performance to create motivation to improve quality and effectiveness. Analyze and propose more appropriate health insurance contracts for medical care services provided at commune health stations.
- Implement research to determine the set of basic healthcare services based on analysis and assessment of the healthcare needs, cost-effectiveness, and conditions needed to ensure implementation.
- Ensure adequate state budget resources to pay for services in the area of public health (such as health communication to improve awareness of the community on prevention and early detection of disease covered by national health target programs, managing disease in the community, services to control environmental risks).

#### **2.3.4. Develop appropriate strategies and policies to satisfy unmet need for reproductive health and family planning services**

##### *Short-term solutions*

- For remote and mountainous regions, develop policies to train and effectively deploy trained health workers including midwives, village health workers, village-based ethnic minority midwives, to ensure the availability and retention of human resources at the village level in very difficult-to-reach areas. Allocate budget for refresher training for health workers at the grassroots level as required by the circular on continuing medical education under the Law on Examination and Treatment.
- Complete policies, guiding circulars and a feasible financial mechanism and scheme to support outreach activities provided by commune health station and district level staff.
- Develop new approaches to provide reproductive health services to young and unmarried people and migrants, such as school-based, workplace-based, and entertainment-based locations, and ensure financial resources for these services.

### **3. Coverage of medical services, rehabilitation and traditional medicine**

#### **3.1. Situation assessment**

In recent years, the implementation of some new policies on improving the quality and accessibility to medical services for people has brought about remarkable results. These include policies on investment in infrastructure of the district and provincial hospital network [99-101]; the project on reducing hospital overcrowding [102]; the project on satellite hospitals [103]; and the investment project on upgrading commune health stations to achieve the National Benchmarks according to the National Target Program on Building a

New Countryside. Human resources policies have also contributed to these goals including the policy on periodic secondment of practitioners from higher level facilities to serve at lower level medical care facilities [104]; the project on sending 500 young volunteer doctors to mountainous and disadvantaged areas with priority on the 62 poorest districts [105]; the project on encouraging training and developing human resources for medical specialties including tuberculosis, leprosy, mental illness, surgery, forensic evaluation, and policies on incentives and special salary supplements [106, 107]; and policies regulating standards, functions and obligations of commune and village health care workers [108]. Health financing policies have also been revised to achieve these goals including the official price schedule covering 447 examination and treatment services [109] and Decree No. 85/2012/ND-CP dated 15 October 2012 on the operational and financing mechanism for state health service units, and service costs applied for public health facilities. Solutions have also been implemented to improve medical care quality and guidance on the implementation of lab test quality management [110-112].

Below is the situation assessment aimed at proposing solutions for improving medical examination and treatment, rehabilitation and traditional medicine service provision in order to implement UHC.

### **3.1.1. Organization of the medical service delivery network**

#### **Achievements and progress**

The medical services network continues to expand in both the public and private sectors. By the end of 2012, the entire country had 1180 public and private hospitals with a total of over 200 000 beds achieving 25.04 beds per 10 000 people (excluding commune health stations and including only planned beds for public hospitals). The number of actual beds is 11 per cent higher than total planned beds in public hospitals, but these beds are not supported by state budget resource allocations. According to statistical data of WHO in 2012, the number of beds per 10 000 people in Vietnam was high for Southeast Asia [113]. With decentralization, the Ministry of Health only manages 35 central hospitals, while provinces manage 382 provincial hospitals (includes also regional inter-district hospitals) accounting for about 50 per cent of all beds and 561 district hospitals accounting for about 30 per cent of beds. There were 48 sectoral hospitals, mainly general hospitals, with beds accounting for 4.2 per cent of the total. Provincial general and specialist hospitals (mainly tuberculosis, mental illness, traditional medicine, pediatrics or obstetrics and pediatrics, ophthalmology, and rehabilitation) are concentrated in the provincial capitals [114]. Almost all districts have general hospitals or regional inter-district hospitals to provide first level medical care services.

Nationwide there are 150 private hospitals that have been issued licenses, with approximately 9611 beds. The dominant characteristic of the private medical service network is its concentration in large provinces (Ho Chi Minh City, Hanoi, Da Nang, Nghe An, Thanh Hoa, An Giang, etc.) and urban areas, places where high income people with purchasing power reside. Private hospitals also focus service provision on medical fields where it is easy to recover capital investments, hospital stays are short, and in specialties with a large demand such as obstetrics, oncology, dentistry or narrowly defined general practice. Even though there are geographic and financial barriers, the proportion of people who access and use private services has been increasing among all groups, including the poor, women, and disadvantaged groups. This contributes to reducing overcrowding of state hospitals in the same specialty.

*Provision of medical services at the commune health station according to the Law on Health Insurance* has also created a mechanism for commune health stations and district facilities to participate in providing primary medical services and increasing accessibility of medical services to the people right at the grassroots level. Up till now, about 78.8 per cent of commune health stations provide medical services reimbursed by health insurance.

### **Difficulties and shortcomings**

The medical services network covers most areas of the country, but lacks a mechanism for linkages and coordination between curative and preventive care facilities. Shortcomings in the current assignment of curative care functions, tasks and assignment of levels at which different technical medical services should be provided has led to fragmentation and discontinuity of care. The referral system has broken down leading to severe overcrowding at higher level facilities.

There is a lack of policies and regulations to ensure provision of basic medical services of good quality, specifically there are few treatment guidelines, a lack of policies and instruments for accreditation, and quality monitoring. No mechanism has yet been developed for monitoring and ensuring adequate inputs for service provision (such as physical facilities, medical equipment, funds, drugs, etc.) in order to meet the requirements for providing basic medical services.

Commune health stations face many difficulties in providing medical services reimbursed by health insurance because of overlaps that exist in the decentralized management systems. Provision of medical services to insured patients at the commune has been implemented through contracts signed between the district VSS office and the district hospital, but also in contracts between the district hospital and the district health center, which has led to difficulties and delays in providing drugs and supervision of activities at the commune health station [115].

Supervisory regulations and mechanisms for accountability among hospital managers remain weak. The authority of managers remains limited and has only been laid out clearly for hospital managers, not managers of other kinds of health facilities, particularly at the commune level. Managers of medical facilities in general, and particularly of hospitals, do not have full authority to decide on their budgets, health service payment methods, prices or human resources issues. Almost all managers of medical facilities are doctors who have not received specialized training in management. Limitations in the health information system also adversely affect performance management.

### **3.1.2. Provision of medical, rehabilitation and traditional medicine services**

#### **Achievements and progress**

##### *Medical service provision and utilization*

*Hospital medical services have grown considerably.* In 2012, there were 132 million hospital visits, an increase of 6.8 per cent compared to 2011. Among these, the highest increase occurred in private hospitals with an increase of 19.1 per cent compared to 2011. Hospital overcrowding at central and provincial levels has only slightly improved as seen by minor declines in the bed occupancy rate. Medical services at the commune level have been scaled up, while management of several chronic diseases such as asthma, hypertension and diabetes is being piloted to reduce overcrowding at higher levels and to bring medical services closer to the population.

*The capacity of the grassroots health network to provide medical services is improving.* In the process of implementing projects 225 and 47, some 145 district hospital and 46 regional general hospitals were built and put into operation using funds raised through government bonds [116]. Some 250 district hospitals were upgraded between 2005 and 2008 and an additional 591 between 2008 and 2010. After 10 years of implementing Directive 06, the number of district general hospitals has increased by 17 per cent, the number of district level patient beds rose by 64 per cent. The number of hospitals upgraded to a higher class and the bed occupancy rates have increased, while professional specialization is developing, particularly in the area of traditional medicine [117]. In 2010, 80.1 per cent of communes met national health benchmarks, in 2011 and 2012 new national commune health benchmarks were issued, but it is not yet possible to assess achievement due to lack of consistency in which benchmarks are used for reporting. Through the end of 2012, 76 per cent of communes had a doctor and 93.4 per cent had a pediatric-obstetric assistant doctor or midwife, while 96.6 per cent of rural villages had a village health worker. Some 78.8 per cent of communes provide medical services reimbursed by insurance.

*Utilization of medical services at the grassroots level, particularly at the district hospital has seen a clear increase.* The proportion of all outpatient visits in state facilities at the district level increased from 11.9 per cent (2004) to 17.6 per cent (2010); and the proportion of all inpatient admissions in state facilities at the district level increased from 35.4 per cent to 38.2 per cent. Inpatient visits increased 1.5 times and outpatient visits increased 3 times over the decade. The proportion of pregnant women who received antenatal care increased from 81.65 per cent to 100 per cent. In 2012 at the district level, patient beds only accounted for 30.5 per cent of total beds, yet total medical examinations accounted for 45 per cent.

The military-civilian health cooperation program invested in military-civilian health facilities such as upgrading health stations, supplementing medical equipment for 171 commune health stations in border, remote and isolated areas, and in important national defense and security regions. The program provided training and expanded knowledge about obstetrics, pediatrics and public health for 167 border military assistant doctors and hundreds of soldiers who became health workers at communes and villages after completing military service.

### *Developing the family medicine model*

Since 2002, medical universities in Vietnam have provided training in the family medicine specialty. The number of health facilities with family medicine specialists of good professional capacity has increased dramatically at the commune level, particularly specialists with training in emergency, internal medicine and pediatrics which are included in the scope of services that should be available at the commune level [118]. Family medicine specialists working at commune health stations are appreciated because of their professional capacity and service attitude, and an increase in the number of families receiving health care management for all household members [119].

The project on developing the family doctor model is part of “the hospital overcrowding reduction project” approved by the Prime Minister in Decision No. 92/QĐ-TTg dated 9 January 2013. This project sets out the tasks of developing and promoting a family doctor clinic model integrated with existing medical facilities to strengthen management capacity, continuity and comprehensiveness of medical service delivery for individuals and households. Initially, from 2013 to 2015, the family doctor clinic model will be piloted in Hanoi, Ho Chi Minh City and several localities. Ministry of Health issued the Decision No.

936/QD-BYT dated 23 March 2013 approving the family doctor project with targets assigned as part of the hospital overcrowding reduction project.

### *Rehabilitation service delivery*

The network of rehabilitation hospitals has been set up in most provinces. The Ministry of Health is developing a circular stipulating the functions, tasks and organization of rehabilitation hospitals under the authority of the provincial health bureaus. Reference materials on early detection and intervention for children with disabilities have been developed, and software to manage information about people with disabilities is being developed for trial application before scaling up nationwide.

Rehabilitation has also been put into a component project of the National health target program. The community-based rehabilitation program was initiated in 1987, and has been expanded widely in most parts of the country. According to statistics reported from localities, by 2010 the community-based rehabilitation program for people living with disabilities has been implemented in 51 provinces with 337 districts and 4604 communes nationally. From 1987 to 2010, the program surveyed, detected, and facilitated health management for 170 000 people with disabilities, as well as applied rehabilitation techniques for 23.2 per cent of people with need and 44.7 per cent of people with disabilities.

### *Delivery of traditional medicine services*

The health sector continues to implement the Government Action Plan on development of Vietnamese traditional medicine to the year 2020 (according to Prime Ministerial Decision No. 2166/QĐ-TTg dated 30 November 2010). The traditional medicine network has been formed and developed at four levels (central, provincial, district and commune) and has contributed remarkably to medical examination and treatment. There are 58 traditional medicine hospitals nationwide including two central hospitals, two sectoral hospitals, one hospital affiliated with the Vietnam University of Traditional Medicine, and a large number of provincial hospitals. In addition, provincial general hospitals have traditional medicine departments; 90 per cent of district hospitals have traditional medicine departments or teams; 85 per cent of commune health stations utilize traditional medicine in medical examination and treatment. The private traditional medicine and pharmaceuticals network consists of 3 hospitals and over 10 000 traditional medicine clinics with an average per clinic of approximately 2000 patient visits per year [12].

The share of medical examination and treatment visits using traditional medicine has increased substantially, reaching 8.8 per cent at the provincial level, 9.1 per cent at the district level and 24.6 per cent at the commune level. The share of inpatient treatments using traditional medicine or combining traditional medicine with modern medicine reached 8.6 per cent at the provincial level, and 17.1 per cent at district level. The proportion of outpatient treatment using traditional medicine was 12.6 per cent at the provincial level, 8.1 per cent at the district level, and 25.9 per cent at the commune level.

## **Difficulties and shortcomings**

### *Medical service delivery.*

Morbidity patterns are rapidly changing while the medical service system is not keeping up with needs, especially for non-communicable diseases, injuries and accidents. Grassroots level services for managing non-communicable diseases are expanding, but are unable to meet the need in terms of professional competencies, drugs and other conditions [120]. Chronic disease management at the commune health station is currently



only being piloted, as commune health stations lack adequate capacity for this work. The cancer prevention and control network and medical radiation services have been set up, but the ability to meet needs is limited, as more time and appropriate investments are needed.

Overcrowding in tertiary hospitals, particularly in some specialties such as ophthalmology, pediatrics, cardiology, obstetrics and endocrinology is widespread and has not achieved any noticeable improvement. Hospital bed occupancy rates of Central hospitals on average in 2012 were 112.5 per cent (a reduction from 113.2 per cent in 2011) [114]. Bach Mai Hospital, K Hospital, and the Central Endocrinology Hospital have set up second and third facilities and added beds, but have still not fully resolved overcrowding. The National Hospital of Pediatrics, Ho Chi Minh City Oncology Hospital, Cho Ray Hospital, Pediatrics Hospitals 1 and 2 in Ho Chi Minh City and Central Obstetrics Hospital remain heavily overcrowded with bed occupancy rates over 120 per cent.

Capacity of lower level facilities is limited. Although district hospitals implement a substantial number of surgeries and medical procedures, many hospitals at this level do not yet have the ability to implement all medical techniques assigned to that level and must transfer patients to higher level facilities, mainly because of a lack of medical personnel with appropriate levels of professional qualifications.

Changes in the organizational model and management mechanism occurred continuously during the period 1999–2008, leading to organizational instability, disruption in the medical workforce and ability to provide services throughout the grassroots health network, with negative impacts on the morale of health workers. Regulations on the functions and tasks of district level health units currently contain many shortcomings, hindering implementation of professional tasks.

The grassroots health care network (at both district and commune level) is quite broad, but investments remain limited. Some projects have been approved, however financial sources have not been balanced (Project 950) or there is a shortage of investment funds according to the approved decision (Project 47). Infrastructure and medical equipment are inadequate to meet requirements for improving medical service quality. Socio-economic development in many localities is too low to meet commune health station investment requirements.

Health human resources development still faces many difficulties in terms of quality and quantity of health workers, while incentives for health care workers remain unattractive.

There are still no specific minimum standards criteria to use in determining when health insurance should cover commune health services, and there is a lack of consensus for implementing this policy.

#### *Shortcomings of private health care facilities and of public-private partnerships in state hospitals.*

Most private general hospitals are not comprehensive general hospitals. Services offered at private facilities tend to focus on specialties for which it is easy to attract patients and services are easy to implement. Private facility prices are generally higher than public facilities, thus negatively influencing the population's access to these services.

The management of private medical facilities has been devolved to the provincial health bureau and district health offices, but their human resources are insufficient, particularly the shortage of inspectors, so management of these facilities faces many difficulties. Foreigners illegally providing medical services have been detected in some clinics.



Public-private joint ventures in hospitals yield benefit in terms of promoting technology development and increased convenience for patients to receive services, but they are prone to overproviding unnecessary services in order to quickly recover investments. The mechanism of delivering medical services that meet the higher demand for “hotel services” of those who can afford to pay has not received adequate guidance in legal documents, so use of public infrastructure for service delivery for private gain through increased health worker income still occurs, leading to health care inequity.

### *Rehabilitation service delivery*

The network of rehabilitation hospitals has taken shape, but few of these facilities can perform their full set of functions and tasks. Investment in rehabilitation remains limited. Community based rehabilitation programs have been implemented, however investment funds for these programs still face difficulties. Some new health problems are emerging (e.g., autism) without adequate intersectoral cooperation and investment to meet the need.

### *Traditional medicine service delivery*

The traditional medicine network has been set up and developed, but according to a Ministry of Health assessment, after 8 years of implementing the National policy on traditional medicine to the year 2010, almost none of the targets have been achieved. Investment in traditional medicine remains limited, awareness of the significance of traditional medicine remains low. Most traditional medicine hospitals are trying to expand use of modern medicine services. Management of traditional medicines and medicinal materials faces many shortcomings. Detection of heavy metals and toxic preservatives in some traditional medicines has negatively affected the people’s health (e.g. high lead concentration in some types of herbal drugs for children).

### *Service quality does not meet demand*

Few hospitals have established quality systems. Only 9 per cent of hospitals currently have quality plans, 29 per cent among class 1 hospitals, 12 per cent among class 2 hospitals and 2 per cent among class 3 hospitals. Only 5 per cent of hospitals have project or programs for quality improvement [121].

The system of professional guidelines is incomplete and not regularly updated. Up till now the Ministry of Health has compiled and issued about 2000 technical procedure protocols, over 200 diagnosis and treatment guidelines for common diseases, emergency care and pediatrics. Yet there is no external mechanism to evaluate compliance with the guidelines, only internal evaluation systems through drug and therapy committee activities, patient record reviews, reviews of drug prescriptions and an annual hospital survey with verification.

Some hospitals have taken extra steps to apply quality improvement solutions and quality accreditation (JCI, HAS) or quality certification (ISO), or total quality management (TQM), but this is ad hoc without any systematic program or concrete mechanism to encourage hospitals to apply these systems.

Issuing practice certificates only one time without competency evaluation and not linked with continuing medical education has inadequate impact on quality of medical professionals. The hospital autonomy mechanism and fee-for-service provider payments tend to have negative side effects of over prescription of drugs, and overprovision of medical services, leading to increased costs and waste, increased co-payments for insured patients increase and encouragement of hospitals to provide services not covered by insurance, creating financial burden on patients.

### **3.1.3. Continuity of care, referrals**

#### **Achievements and progress**

Continuity of care plays an important role in improving medical service quality, particularly in increasing access to medical services. In the last few years, despite negative effects of some macro-level mechanisms and policies, continuity of care has improved especially in some national health target programs (e.g. tuberculosis and HIV prevention and control programs). Some other component projects of the national health target program implemented since 2008 according to Prime Ministerial Decision No. 172/2008/QĐ-TTg dated 19 December 2008 have shown initial results towards increasing continuity of care in management of chronic disease, such as in the projects on prevention and control of diabetes, COPD, cancer and the establishment of chronic disease management units at provincial and district hospitals.

According to the Law on Health Insurance, patients are entitled to receive medical services at any health care facility without restrictions related to administratively set geographic boundaries or technical level of the facility. Patients bypassing lower level health facilities to seek care at higher levels still receive partial reimbursement of their costs. In 2005, the Ministry of Health issued Decision No. 23/2005/QĐ-BYT stipulating the assignment of technical medical service provision to different level facilities [122], but with the perspective that this technical referral system is not tightly binding and is managed by the Ministry of Health, provincial health bureaus and social insurance (for insured patients). This regulation has contributed re-assessment of the technical capacity of health care facilities and surveillance over the application of new technologies to ensure minimum safety and quality standards.

The Vietnam Administration of Medical Services is undertaking research in order to revise and amend the list assigning technical medical services to different levels and to revise the referral system. The revisions are oriented towards guiding patients towards appropriate levels of care, and facilitating application of new diagnostic and treatment technologies and methods at provincial and district hospitals to meet the needs of the people in the locality. Efforts are being made to ensure that these policies are in line with goals of the Law on Examination and Treatment to strengthen professional capacity at lower levels and reduce overcrowding at higher levels [123]. A circular guiding use of the referral system is being developed with the intention of reducing procedural hassles and allowing direct referral of patients to appropriate higher levels for treatment in the case that the lower level facilities are unable to implement a required technology.

#### **Difficulties and shortcomings**

Cooperation between preventive and curative care has been affected by changes in the organization of the health care system at the district level. In 2004, Decrees 171 and 172 replaced Decree 01 (1998), and were soon replaced by Decrees 13 and 14 in 2008, with a guiding joint Circular 03 that basically consisted of splitting the district health center into a district hospital, district preventive medicine center and district health office.

Continuity of care is affected by the financial autonomy mechanism according to Decree No. 43, in which autonomous hospitals have a preference to retain patients for treatment rather than refer them, so cooperation between higher and lower level facilities is weak.

Referral for patients, especially insured patients faces difficulty due to :

- Lack of clear regulations on referral, particularly on determining which is the correct level of care for a given patient.
- Lack of patient trust in the professional capacity of the lower levels, which has given rise to increased demand for medical care at higher levels, even for treatment of mild cases that could be treated in hospitals at lower levels.
- In some cases, commune health stations need to refer patients directly to tertiary hospitals, bypassing district and provincial hospitals that lack of capacity of delivering required services. In this case, since this is considered bypassing, health insurance reimbursement to facilities is only 30 per cent with the patients paying high co-payments [124]. Some localities do not implement insured health care services at commune health stations, yet hospitals are overcrowded with a large number of insured patients registering for first level care, thus negatively affecting access to health services of insured people.
- Downward referral of patients to lower levels remains limited due to a lack of communication and information feedback between levels.

Quality and quantity of the health workforce at the grassroots level do not satisfy the requirements for non-communicable diseases management. The health management information system is weak. Commune health stations lack basic drugs and medical equipment recommended by WHO [120].

### 3.2. Priority issues

- Delivery of medical services, rehabilitation and traditional medicine does not meet demand: overcrowding in tertiary hospitals has not been reduced to any substantial extent, while capacity to provide services at lower levels remains limited.
- Quality of medical services has many limitations: there is a lack of policy instruments for management and assessment of medical service quality, the professional standards system is inadequate and compliance is not strictly enforced.
- Continuity of care has received inadequate attention because the referral system and coordination between levels has many shortcomings and because of the effects of financial autonomy.
- Management of private sector medical facilities is not yet effective, so the private sector has not lived up to its promise to help in reducing overcrowding and strengthening health care service coverage. Capital contributions, joint ventures and business partnerships to develop medical technologies, and provision of higher quality hotel services to collect higher service fees in public hospitals are all practices that lack effective regulations, and can easily lead to overprovision of technologies and laboratory services.

### 3.3. Recommendations

In order to resolve the above priority problems, this report proposes the following sets of solutions:

#### 3.3.1. Strengthen the ability to provide medical services at the grassroots level

*Short-term:*

- Implement a pilot study and evaluation of a model that integrates commune health stations with district health centers, including placing doctors on the payroll of the

district health center, with rotations for providing medical care services at the commune health station.

*Long-term:*

- Strengthen capacity of commune health services so they are able to provide services appropriate with the needs for healthcare in the community, especially management of non-communicable disease and implementation of national health target programs. Consider adjusting training curriculum to ensure that new graduates are able to perform necessary tasks at commune and district health facilities.
- Develop remuneration mechanisms suitable for commune health care workers and mechanisms to attract private doctors and traditional medicine practitioners to participate in providing medical services at the grassroots healthcare level.

**3.3.2. Improve service quality**

*Short-term*

- Develop and amend regulations and guidance for improving service quality; develop competency standards for service provision for each level; design national quality system with indicators, standards, instruments and medical service quality assessment mechanisms; and propose financial and non-financial incentive mechanisms for facilities that meet quality standards
- Develop an action program for service quality improvement with specific projects for different sub-areas and an appropriate roadmap for each level. Standardize medical techniques and strengthen technology transfer to lower levels in order to improve their capacity to meet demand and to improve their professional qualifications.
- Strengthen inspections, verification and tight management of professional activities and compliance with legal regulations on medical services at medical facilities in order to ensure quality of services provided, especially in the private sector.
- Develop guidance on delivering higher quality services for a higher fee in state facilities, and adjust regulations in order to limit negative side effects of PPP in public hospitals.

*Long-term*

- Consider amending the Law on Examination and Treatment towards: granting medical practice certificates to practitioners only upon evidence of successful results in competency examinations, grant time limited practice certificates and combine licensing with continuing medical education.
- Implement an independent accreditation mechanism to evaluate and accredit health care facility quality.
- Increase training and guidance for applying quality methods in medical facilities.
- Research and develop a model for commune health stations to provide medical services reimbursed by insurance; introduce incentive policies for commune health stations that achieve quality standards.

### 3.3.3. Continuity of care and referral

#### *Short-term*

- Strengthen the expansion of non-communicable chronic co-morbidities management to provincial, district and commune levels, focusing on management in the community. Implement professional mentoring according to Ministry of Health Decision No. 5068/QD-BYT, provide guidance on information management, storage, exchange and feedback mechanisms among levels.
- Strengthen the implementation of Circular No. 01/2013/TT-BYT on managing lab test quality; lab test quality control; and establishment of a system of reference laboratories; regulations on routine lab testing for patients and guidance on mutual recognition of paraclinical results at different facilities.
- Complete the development and promulgation of a circular guiding implementation of the referral system with the objective that the patients should be able to access, without delay, facilities that have adequate capacity to meet their medical needs, and insured patients should not face administrative hassles for referrals, thus ensuring their legitimate rights.
- Complete and issue guidance on the system assigning different medical techniques to different facility levels, to guide investments and aid in managing referrals.

#### *Long-term*

- Continue to study suitable mechanisms for assigning different medical services to be implemented at different level facilities. The mechanism should be appropriate with the available professional capacity and population need and avoid being too rigidly tied to administrative boundaries. This should promote technological development of medical facilities, while at the same time strengthen the grassroots health system with integration between the commune health station, family doctors and private doctors participating in PHC provision, with the aim of health management on a household basis.
- Continue to study and apply an effective mechanism to foster cooperation between curative and preventive care, particularly at district and commune levels. Refine the model of health system organization at the district level in order to strengthen cooperation between preventive and curative care.
- Reformulate the capitation payment mechanism towards the true meaning of capitation (including both treatment and prevention within a province, district).
- Continue to monitor, assess and adjust implementation of the referral system.

## 4. Access to essential medicines for universal health care

According to WHO, access to medical technologies and essential medicines is indispensable to achieving universal health care [125].

In developing countries, the availability and price of essential medicines tend to be major problems; in the context of limited healthcare resources, the out-of-pocket share of total health expenditures is high (more than 50 per cent), and a large share of health spending is for medicines (68 per cent) [126]. An international study showed that globally, only 42 per cent of public pharmacies and 64 per cent of private pharmacies consistently had adequate essential medicines available. This has improved slowly during the period from 2001 to 2008 [127]. According to an international survey by WHO, in the public sector, generic drugs

are sold to patients with prices ranging from 1.9 times to 3.7 times higher than international reference prices, while innovator brand drug prices were between 5.3 and 20.5 times higher than reference prices [128]. Access to drugs doesn't depend only on availability of drugs and drug prices, but is also influenced by safe and rational use. Therefore, access to quality essential medicines and rational, safe and effective use of drugs are goals of many countries including Vietnam. In Vietnam these are the second basic goal of the National drug policy.

## **4.1. Situation Assessment**

### **4.1.1. Policies related to medicine access and essential medicines**

With an understanding of the important role of essential medicines in health care in general and in PHC in particular, the Ministry of Health issued the first essential medicines list in 1985. This list was subsequently updated in 1989, 1995, 1999 and 2005. The current essential medicines list was issued in 2005. Starting with the third list, essential drugs were categorized to allow different drugs to be allowed for use in different level facilities depending on technical capacity. The drugs, including dosages and forms of administration have changed over time, in relation to changes in morbidity patterns and socio-economic conditions over time. The drug list used at grassroots facilities issued by the Ministry of Health is considered as recommended, but each locality can develop a more appropriate drug list based on morbidity patterns in their locality. Criteria for selecting drugs include existence of generic versions, availability, efficacy, limited side effects, low toxicity and low cost.

In addition to the essential medicines list, on 1 February 2008, the Ministry of Health issued the major drug list, to serve as a basis for medical facilities to select drugs to meet therapeutic need and for health insurance reimbursements for insured patients [129]. Strict compliance with the major drug list could have beneficial effects on safe and rational use of drugs in medical facilities. In the near future, the major drug list will be replaced with the drug formulary for health insurance reimbursement.

The National Drug Policy for the period from 1996–2000 set one of its goals as “Ensuring regular supply of adequate drugs of good quality for the people. Ensure rational, safe and effective use of drugs” [130].

The Draft National Drug Policy for 2011–2020, with a vision to 2030, and the draft Law revising and amending some articles of the Law on Pharmaceuticals has given particular importance to the essential medicines policy and generic drug policy [131], specifically:

- The Government promotes research, production, import, export, and supply of essential medicines, ensuring all populations, especially the poor, ethnic minorities, remote and mountainous populations, can choose and utilize essential medicines for treatment of common diseases at all times and everywhere with good quality, adequate quantities, appropriate dosage forms, certified safety and reasonable prices.
- The generic medicine policy should be the basis for production, import, export, supply and utilization of medicines. Generic medicines should be prioritized in all stages from product registration, production, import, export, supply and utilization. Prescription and utilization of generic drugs meeting bioequivalence standards should replace imported brand name drugs as one of the important health sector objectives.



#### 4.1.2. Status of access to medicines

##### Achievements and progress

###### *Pharmaceutical distribution network*

The pharmaceutical distribution network in Vietnam extends to almost all localities, even to the commune level in the form of medicine cabinets in commune health stations and retail drug distributors (private pharmacies, drug agents, etc.), enabling relatively easy access to pharmaceuticals, particularly essential medicines. According to Ministry of Health statistics, 98.9 per cent of communes have health stations [132]; almost all commune health stations have medicine cabinets. In 2011 there were 10 250 private pharmacies nationwide, and a total of 44 000 drug retailers in public and private sectors combined [133]. On average, there is one drug retailer for every 2000 people. The quality of the pharmaceutical supply network has been strengthened by the promulgation and implementation of standards for Good Distribution Practice (GDP), Good Storage Practices (GSP), and Good Pharmacy Practice (GPP). By 2012, there were 3950 GPP pharmacies, accounting for 39 per cent of all pharmacies nationwide [28].

The State also has prioritized policy towards development of retail and other drug outlets in disadvantaged, mountainous, remote and isolated areas so that all people can obtain medicines to use when ill. The Prime Minister has also approved a project on “health development for islands and coastal areas by 2020”, in which attention is paid to ensuring access to essential medicines for the people in these regions. Implementation of this project includes ensuring that all ships are outfitted with adequate medicines and medical equipment according to regulations.

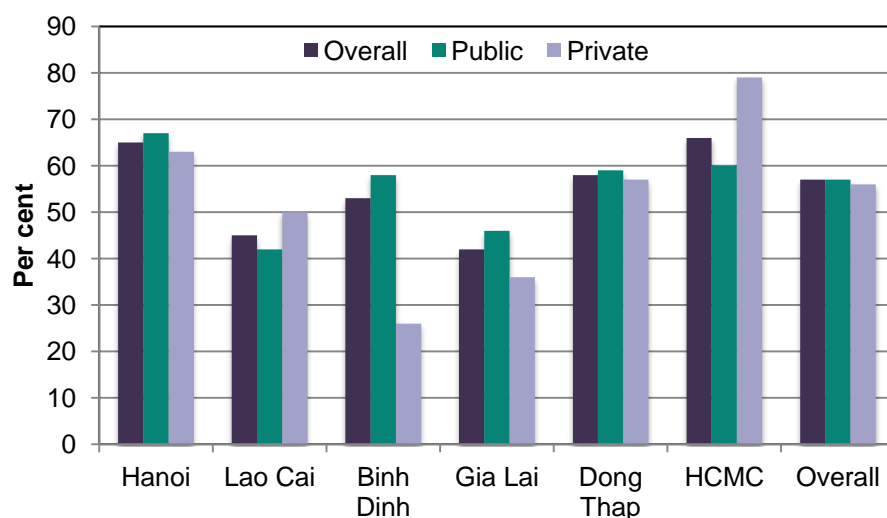
At district and central hospitals, in addition to the pharmacy department, with the role of dispensing medicines to hospitalized patients, there are also hospital pharmacies, with the role of dispensing medicines to outpatients.

###### *Availability of essential medicines at health care providers and households*

The supply of medicines at hospitals is procured regularly through a competitive tendering processes in order to ensure the availability of medicines for medical treatment. A 2005 study assessing implementation of the National drug policy shows that almost all types of essential medicines are available at medical facilities at all levels. Among 35 essential medicines in the list of medicines selected for the survey, the average number of drugs available at drug counters was 26.0 (74.3 per cent of the list); at commune health stations the average was 22.4 (64 per cent); hospital pharmacy average was 26.6 (76 per cent) and at private pharmacies 28.5 (81.4 per cent) [134].

According to another survey in 2010 on a selection of 30 medicines (Figure 13), 55.9 per cent of these 30 essential medicines were available at public facilities, 56.4 per cent at hospital pharmacies and 55.3 per cent at private pharmacies. The proportion of essential medicines available was incrementally lower when moving from central hospitals (71.7 per cent) to provincial hospitals (68.1 per cent) to district hospitals (58.8 per cent) and was lowest at the commune health stations (28.3 per cent) [28].

The proportion of households with medicines at home was relatively high. A case study showed that the proportion was more than 70 per cent, including unused medicines leftover from previous treatment, as well as reserve medicines bought for use when needed. Households with higher income have a higher number of reserve medicines [135].

**Figure 13: Proportion of drugs available at studied sites, 2010**

Note: The average proportion of drugs available out of 30 drugs on the surveyed list.

#### *Access to medicines for diseases covered in national health target programs*

Medicines serving national health target programs, such as the national tuberculosis control program or mental health program, are procured with state budget funds. These programs are considered to be run effectively at the grassroots level. Patients with pulmonary tuberculosis, schizophrenia and epilepsy are provided free treatment. There is no evidence of shortage of drugs for treating these diseases at the grassroots level.

With the support of international organizations such as the President's Emergency fund for AIDS relief (PEPFAR) and the Global Fund, ARV treatment is provided free of charge to people living with HIV/AIDS and is implemented on a broad scale. In 2012, the number of people infected with HIV who met the criteria for access to care and treatment with ARV was 72 834 (the plan was for 72 000 people). Approximately 94 per cent of pregnant women with HIV infection and their children are provided with prophylactic ARV treatment [44]. In addition to expanding the number of people being treated with ARV, efforts at pharmacovigilance and detection of side effects from ARV drugs have begun to be implemented. Currently the Vietnam Administration of HIV/AIDS Control has been coordinating all ARV resources provided by different programs and projects to deliver care and treatment to patients [44]. An intervention to minimize HIV infection by methadone replacement has been carried out at 60 treatment sites in 14 provinces.

Patients infected with HIV are provided preventive treatment against tuberculosis using isoniazid (INH). The HIV Program and National Tuberculosis Prevention and Control Project have developed a joint guideline and plan to integrate activities of the two programs during 2012–2015. Technical guidelines on tuberculosis screening and prevention among patients with HIV have also been finalized for approval [44].

#### *Medicine financing and prices*

Ensuring prices of drugs at levels affordable to the people's ability to pay is an important factor in WHO's drug access framework [136]. In Vietnam, according to the Law on Pharmaceuticals (2005), facilities involved in manufacturing, import, export and wholesale trade of drugs set their own prices on the basis of market competition, but are subject to state management for price stabilization. The price of drugs paid by the health

insurance fund in public hospitals is regulated mainly through competitive tendering for procurement. Open posting of information on prices in order to improve transparency is one of the main mechanisms Vietnam uses to stabilize drug prices [137].

Data from the GSO indicate that after a period of rapid increases in the consumer price index for drugs and medical services, price increases have gradually been controlled. For the past few years, drug price inflation has been controlled at a level below general price inflation. The medical price index rose 5.27 per cent in 2012, yet remained lower than the rise in the general consumption price index (6.81 per cent) [27]. In contrast to innovator brand drugs, generic drugs in Vietnam are not priced much higher than the average international reference price. A 2012 survey of competitive tendering winning bid prices for 36 different drugs with the same commercial name, active ingredient, strength and dose showed that winning bid prices indicated that Thailand had 25 drugs priced higher than in Vietnam, and in China 23 drugs were costlier than in Vietnam by a magnitude of from 1.03 to 6.64 times [28]. In general, one could say that generic drugs are affordable to Vietnamese patients.

Drug costs account for a high share of total healthcare costs, and a particularly high share of total hospital costs. Health insurance plays an important role in providing a funding source for drugs, with approximately 70 per cent of insurance reimbursements being for drugs. The proportion of people with health insurance is increasing and this is an important condition to increase the ability of patients to access drugs (see more in Chapter IV, Section 3).

### **Difficulties and shortcomings**

#### ***Implementing the essential medicines policy***

The Law on Pharmacy in 2005 did not mention the essential medicines policy to ensure accessibility of drugs to the people, particularly the poor, and social policy beneficiaries. The Law also did not concretely stipulate a generic drug policy or cost-effectiveness criteria in the selection of drugs for the drug formulary (see details in Chapter IV, Section 4) in order to both ensure treatment effectiveness and reduce costs of drugs for patients. The current draft Revisions and amendments to some articles in the Law on Pharmaceuticals includes these two policies, but has not yet been completed or issued. The National Drug policy 2011–2020, vision to 2030 is still in the drafting stage.

The list of essential medicines has been updated over time, but with long delays. The fifth essential medicines list from 2005 is out of date, some drugs are no longer used in reality, and drugs for treatment of chronic non-communicable diseases have not been amended to the list for use at the commune level. Commune health stations lack information on drugs, some communes don't even have the list of essential medicines and lack medical reference materials for providing care and prescribing pharmaceuticals.

The selection of drugs for the essential medicines list or the major drug list is not implemented effectively through use of criteria such as safety, effectiveness, and particularly cost-effectiveness. Some very expensive drugs, with no evidence of effectiveness, are still give licenses for use in Vietnam and are on the list of drugs to be reimbursed by health insurance despite their high cost. For example, Citicoline, a drug that the United States Food and Drug Administration (FDA) has not approved for use because it is ineffective, continues to be issued a license for use in Vietnam and is still on the list to be reimbursed by health insurance with the price of up to 60 000 per tablet.

### *Pharmaceutical distribution network*

Drug outlets are not yet evenly spread across the country, with a higher concentration in urban areas and major cities [138]. The pharmaceutical distribution network in disadvantaged, mountainous and island areas remains limited. Vietnam has a long coastline and many islands in 28 coastal provinces, populated by 43.9 million people, or approximately half of Vietnam's population. However, access to medicines for residents of islands is not yet ensured. Some islands do not have a pharmacy (23.6 per cent). Some have pharmacies but no or inadequate prescription medicines (35 per cent). Others sell medicines at much higher prices than other places (27.6 per cent) and have low quality drugs (13.6 per cent).

### *Availability of essential medicines at health care facilities and households*

Although access to medicines in general and to essential medicines in particular at commune health stations has improved, it does not yet satisfy the health care needs of the population [139]. The number of medicines at commune health stations is limited. On average in a sample of 110 commune health stations, there were  $70.6 \pm 26.2$  medicines available, of which  $34.0 \pm 12.1$  were essential medicines (49 per cent) [139]. According to two evaluations of the National Drug Policy in 2005 and 2010, although the medicines assessed for availability differed from the earlier study, nevertheless indicated a lower availability rate in 2010 compared to 2005. This suggests that not enough attention has been paid to implementing the Nation Drug Policy.

### *Access to medicines for vulnerable groups*

The availability of medicine for vulnerable populations has not been fully evaluated. An evaluation of implementation of the National Drug Policy showed that the availability of pediatric drug formulations was very low with 43 per cent of provincial hospitals and 50 per cent of commune health stations having none of the selected medicines for children. Almost no hospitals at provincial and central levels had all three selected pediatric formulations [28].

Over 90 per cent of ARV drugs are currently provided for free through external assistance funds provided by international organizations. In the near future, as these organizations stop providing financial assistance, people living with HIV/AIDS face the prospect of no longer being able to access treatment drugs, especially because the price of these drugs are likely to increase under tighter compliance with intellectual property regulations expected when Vietnam participates in the free trade agreement under the Trans-Pacific Partnership Agreement [140].

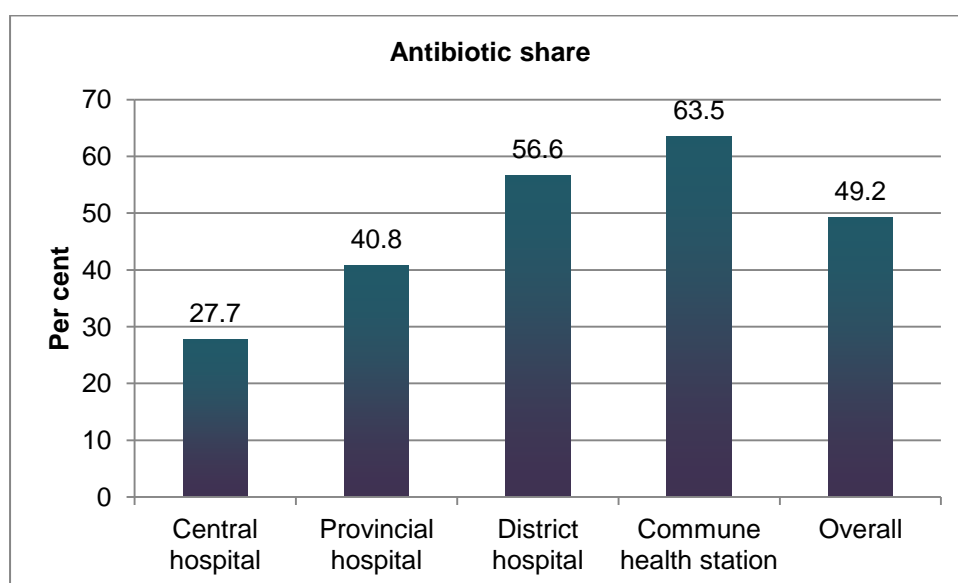
### *Rational use of drugs*

In the community, a high 73 per cent of people self-medicate or rely solely on advice from a drug outlet when obtaining medicine to treat illness [141]. This has resulted in a high rate of antibiotic overuse, for example 71 per cent of children with mild respiratory infection are given antibiotics [142]. Systemic steroids are often given to children by their mothers for a quick recovery, even when they know that the drug has many side effects [143]. The drug outlets and the community do not comply with regulations on sales of prescription drugs. People can easily buy antibiotics and steroids without a doctor's prescription.

Antibiotic abuse also occurs regularly in medical facilities. At commune health stations, 71.2 per cent of prescriptions are for antibiotics, rising to 95 per cent in some areas [144]; this proportion increases to 60.6 per cent in hospitals [145] and can go up to 75.5 per cent among inpatients [134]. According to a survey of the Health Strategy and Policy Institute, the proportion of prescriptions with antibiotics was 49.2 per cent; higher than other middle income countries (43.3 percent) and with quite wide variation: 60 per cent in

communes, 40 per cent at the province level and 30 percent at the central level (Figure 14). Use of antibiotics is common at lower levels because of limited conditions for microbiology and antibiotic susceptibility testing, leading to even higher problems of antibiotic resistance. A recent study found that *Streptococcus pneumonia* was resistant to penicillin in 71.4 per cent of cases, erythromycin in 92.1 per cent of cases. Overall 75 per cent of *pneumococci* were resistant to three or more antibiotics [142].

**Figure 14: Proportion of prescriptions containing antibiotics at public medical facilities, 2010**



Source: Nguyen Quynh Hoa, 2010 [142]

Activities of the drug and therapy committees have not been effective at promoting safe and rational use of drugs. The number of up-to-date treatment protocols available in Vietnam is limited. Enforcement of treatment protocol implementation is weak, leading to a low rate of compliance. Of 531 cases diagnosed with chronic pneumonia, 43.3 per cent were not prescribed with any medicines called for in the treatment protocol. The proportion of prescriptions that followed treatment protocols were 67.7 per cent at district hospitals, 55.8 per cent at provincial hospitals and 50.2 per cent central hospitals [145]. Results of analyzing 30 commonly prescribed, but costly, drugs found that some drugs with no evidence on treatment effectiveness are still widely prescribed such as glucosamine and ginkgo biloba [146].

Inadequate attention has been paid to essential medicines in hospitals. Only 40.8 per cent of drugs prescribed by doctors came from the essential medicines list (compared to 80 per cent in most countries according to WHO data) and this proportion tends to be lower at higher level facilities [28]. Prescriptions following the major drug list also indicate low compliance. In many cases patients are asked to pay out-of-pocket for expensive drugs that are not on the list.

Inadequate attention has been paid to using generic drug names in drug prescriptions at state health facilities. The proportion of prescribed drugs that were prescribed using generic names reached only 28 per cent in a sample of hospitals studied, much lower compared to estimates in global studies, which are around 80 per cent [28]. The belief that brand-name drugs are more effective has led to lack of interest in essential generic drugs from both health care providers and patients, and waste of resources for unnecessarily

expensive drugs that reduce resources available for essential drugs. It is important to mention that there are no sanctions for prescribing drugs not using generic names.

### *Medicine financing and prices*

Some recent studies have found that Vietnam's drug prices are higher than international reference prices [147]. Results of a drug price survey in 2010 show that retail drug prices are 12.1 times higher compared to international reference prices for innovator brand drugs, and 1.4 times higher for lowest price generics [28]. In comparison with WHO data, the drug price index in Vietnam is relatively high for brand name drugs under patent protection, but are relatively low for generic drugs. Organization of competitive tendering for drug procurement is organized in a fragmented manner with 1046 facilities implementing tendering for drug procurement nationally, leading to rather large variation in winning bid prices. In reality prices of drugs with the same active ingredient, strength, mode of administration and in the same time period vary substantially across localities and between hospitals in the same locality, creating considerable waste [29]. The fact that there are so many types of drugs also leads to difficulties in drug price management.

Medicine costs increase annually and accounts for a major proportion of total health costs. High prices along with irrational use of medicines are the main reasons for the increased in drug expenditures, creating heavy financial burdens on the people and impeding access of the people to medicines and medical care. However, the percentage of funds allocated for essential medicines was not high (51.5 per cent). Three forth of commune health stations lacked funds for procuring medicines. Moreover, the major source of funding for medicines was household out-of-pocket spending, accounting for 72 per cent of total expenditure, of which 58 per cent were for self-medication and only 14 per cent for buying drugs at health facilities [11].

Drug price management still faces many shortcomings. First there is little monitoring to ensure effective implementation of regulations on price setting, competitive tendering or drug prescribing. Second, no agency has been assigned primary responsibility for managing drug prices. Third, there are significant difficulties in controlling imported drug prices in a context where domestically produced drugs meet only 50 per cent of need (in terms of drug value) and domestic production is heavily dependent on imported pharmaceutical ingredients (90 per cent). Fourth, regulations on competitive tendering still have some limitations, and do not yet allow for national competitive tendering. Finally, drug price controls through caps on wholesale margins is still only in the pilot stage of implementation.

Once Vietnam joins the Trans-Pacific Partnership Agreement, it is expected that drug prices, especially brand name drugs, will double over the next 5 years, and about 58 per cent of drugs will become unaffordable to the people [140]. This will seriously affect accessibility of drugs in the coming period.

The domestic pharmaceutical industry accounts for less than one percent of GDP. Domestically produced drugs meet only 50 per cent of the value of drugs used, while 90 per cent of drug ingredients are imported, so it is difficult to be pro-active in sourcing drugs or in prices.



## 4.2 Priority issues

### 4.2.1. Difficulties in access to medicines in remote and isolated regions and for vulnerable groups

- There are irrationalities in the pharmaceutical distribution network; supply and access to drugs in disadvantaged areas is limited.
- There is a risk of difficult drug access for people with HIV/AIDS, cancer, tuberculosis and hepatitis B and C.

### 4.2.2. Irrational and unsafe use of drugs

- Management, prescription and use of drugs are not rational.
- Selling and buying prescription drugs without prescription remain widespread.

### 4.2.3. Ineffective drug price control and high drug expenditure burdening the population

- There is not yet an agency with adequate authority and with an effective mechanism for managing drug prices.
- Shortcomings in selection, tender and supply of drugs.
- Prescription and use of generic drugs receive inadequate attention by health facilities.

## 4.3. Recommendations

In order to resolve the above priority problems, this report proposes the following groups of solutions:

### 4.3.1. Increase accessibility of medicines by the people

#### *Short term*

- Ensure adequate essential medicines are available at health facilities in islands, remote and mountainous areas.
- Increase the number of drugs available, including drugs for treatment of chronic conditions, and provide drug information materials at commune health stations.
- Increase efforts to mobilize financial assistance from international agencies for disadvantaged groups, social welfare beneficiaries and vulnerable groups.
- Develop options to ensure drugs for AIDS, cancer, tuberculosis, hepatitis B, and hepatitis C patients.
- Promptly promulgate the Sixth Essential Medicines List

#### *Long term*

- Develop policies to subsidize prices of essential medicines for disadvantaged areas.
- Ensure access to drugs for people in coastal and island areas following the project “Development of healthcare in coastal and island areas to the year 2020”.
- Develop a financial mechanism to support access to medicines for vulnerable groups.
- Update the essential medicines list every 5 years and disseminate it to the grassroots level.

#### **4.3.2. Ensure safe and rational use of drugs**

##### *Short term*

- Strengthen the role of drug and therapy committees in hospitals in the work of developing, updating and monitoring compliance with standard treatment protocols, organization of patient record reviews, and strictly implementing regulations on use of generic drug names in prescriptions and patient records.
- Enforce regulations on buying and selling prescription drugs.
- Redress the situation and impose stiff sanctions on drug companies paying commissions to doctors to influence prescribing and use of drugs at treatment facilities [148].
- Strictly control drug advertisement (for over the counter drugs) in the mass media.
- Periodically conduct media campaigns, health education on rational use of drugs to increase people's awareness of the dangers of self-medication, particularly for antibiotics.

##### *Long-term*

- Develop treatment protocols for common diseases at different level facilities.
- Regulate the timing for updates and revisions of the essential medicine lists.
- Strengthen infrastructure and manpower for microbiology laboratories in hospitals to ensure that the antibiotic susceptibility testing informs antibiotic use.
- Develop a national monitoring system for antibiotic use.

#### **4.3.3. Control drug costs, gradually reduce drug costs in total health expenditure**

##### *Short-term*

- Pilot test and evaluate methods for managing drug prices using caps on wholesale margins. Adjust the current policies on competitive tendering for drug procurement to overcome shortcomings in existing regulations.
- Strengthen inspection and control in accordance with Decree No. 93/2011/ND-CP dated 18 October 2011.
- Increase the share of population covered by health insurance (especially vulnerable groups).
- Increase the proportion of funds allocated for essential medicines; increase funds for medicines at commune health stations.

##### *Long-term*

- Study to inform revisions of the Law on Pharmaceuticals (2005) with an orientation towards strengthening collaboration and concrete regulations on functions and tasks of ministries and sectoral agencies to increase effectiveness in cooperation for drug price management. Implement competitive tendering at a national level for hospitals. Use special dosages and packaging for hospitals.
- Develop a plan to implement the policy of "Enhancing production of domestic generic drugs with bulk packaging for direct supply from manufacturers to medical facilities."

## Chapter IV: Financial protection in universal coverage

In order to achieve UHC, first it is important to develop a health financing system able to ensure that all people can access health services without facing financial difficulties. In order to do this, one must increase financial resources for health; implement risk pooling to protect people from impoverishment due to health spending; and use existing resources more efficiently.

This chapter analyzes the situation and makes proposals for solutions to improve financial protection mechanisms in order to achieve UHC, including reduction in out-of-pocket payments for health; financial subsidies for disadvantaged and vulnerable groups; health insurance; financial resource mobilization; efficiency enhancement in use of existing resources; and provider payment reforms.

### 1. Reducing household out-of-pocket spending on health

According to WHO, household out-of-pocket health payments are payments made directly by households when their members use health services. These include fees for medical services, payment for drugs, medical consumables and hospital services. Out-of-pocket payments also do not include health insurance reimbursements or expenditures on transportation and special dietary regimes [149, 150].

Out-of-pocket payments are classified as private expenditure, which is direct payments from individual households, and depend on household capacity-to-pay without the benefits of risk pooling such as is associated with public spending in which financial resources are mobilized through prepayment into pooled funds (e.g. state budget or social health insurance funds). In addition to out-of-pocket spending, private expenditures also include expenditure for private health insurance, expenditures made by donors, social organizations or charities and direct payments of employers for health services. In Vietnam, out-of-pocket health payments account for 92.7 per cent of private expenditure [151], and add up to over 50 per cent of total health care expenditure. According to the National Health Accounts, the share of household out-of-pocket expenditures to pay for private health services experienced an increase from 20 per cent in 1998 to 30 per cent in 2001, then fell back down to 22 per cent in 2009. During the same period, out-of-pocket health expenditures to pay for public sector health services increased from 12 per cent in 1998 to 44 per cent in 2009, while spending on self-medication has seen a clear decline from 68 to 35 per cent [11].

The higher the out-of-pocket payment share of total health care expenditure, the lower the possibility of financial risk pooling, the more difficult it is for the poor to access health services, and the lower the degree of health equity. Out-of-pocket spending may lead households to cut spending on other necessary items such as food, clothing and children's schooling. According to WHO, it is difficult to achieve the goal of universal health care coverage if the out-of-pocket payment share of total health care expenditure is over 30 per cent [152, 153].

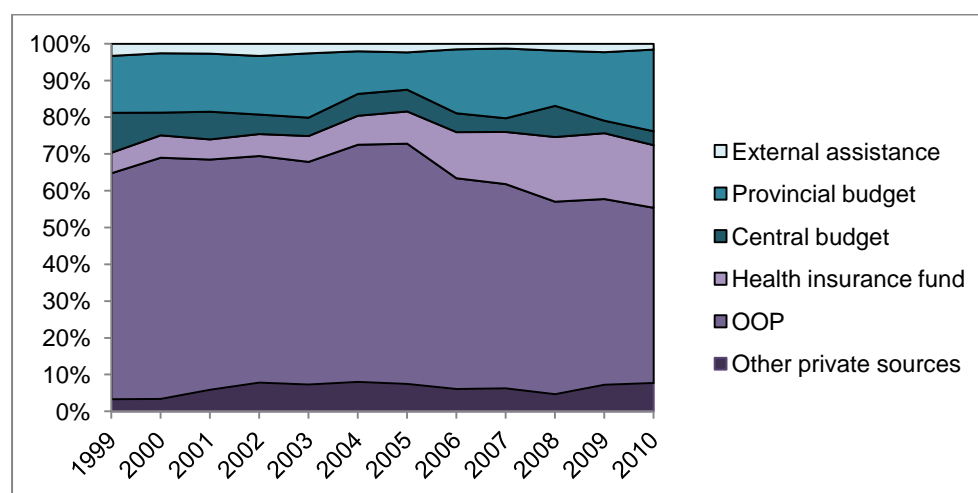
Catastrophic health spending occurs when a household's out-of-pocket expenditures equals or exceeds 40 per cent of household's capacity-to-pay (defined as the household income net of food expenditures) [150]. Out-of-pocket payments also lead to impoverishment when direct spending on health care causes household capacity-to-pay for basic necessities to fall below a poverty threshold.

The goals of UHC and health equity are met only when the population can avoid catastrophic health expenditures and impoverishment due to out-of-pocket payments.

# 1.1. Out-of-pocket payments, catastrophic health expenditures and impoverishment due to out-of-pocket payments in Vietnam

Health care activities in Vietnam are ensured by five health financing sources including the state budget, social health insurance, external assistance funds, out-of-pocket payments and other private sources. Among these, out-of-pocket payments always represent a high proportion. Although the out-of-pocket payments share of total health care expenditure in Vietnam has begun to decline in recent years, it has remained at over 50 per cent (Figure 15) [11].

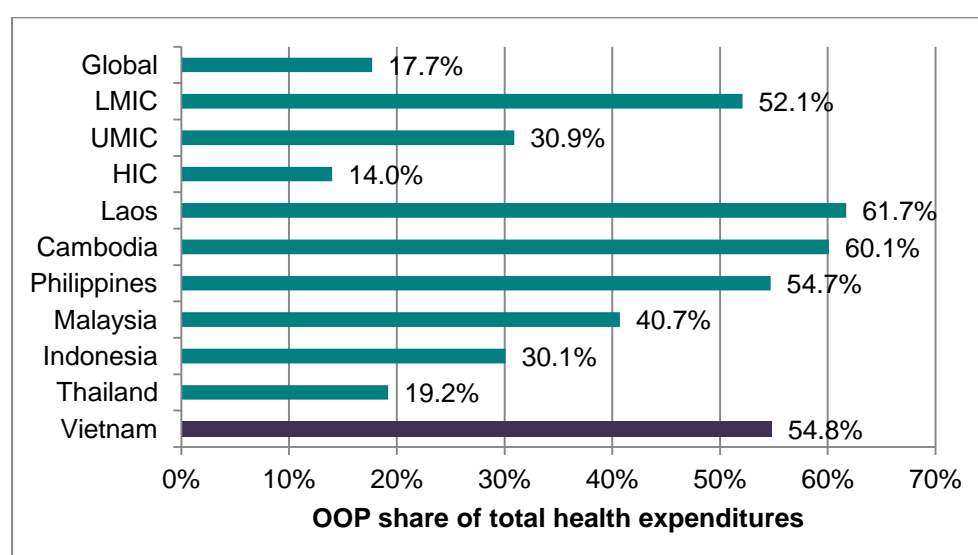
**Figure 15: Structure of health financial sources in Vietnam, 1999–2010**



Source: National Health Accounts, 2011 [11]

The out-of-pocket share of total health spending in Vietnam is relatively high compared to other countries in the region and the world (Figure 16) [154], and is much higher than the level of 30–40 per cent recommended by WHO [152].

**Figure 16: The out-of-pocket share of total health expenditures in selected Asian countries, 2007**

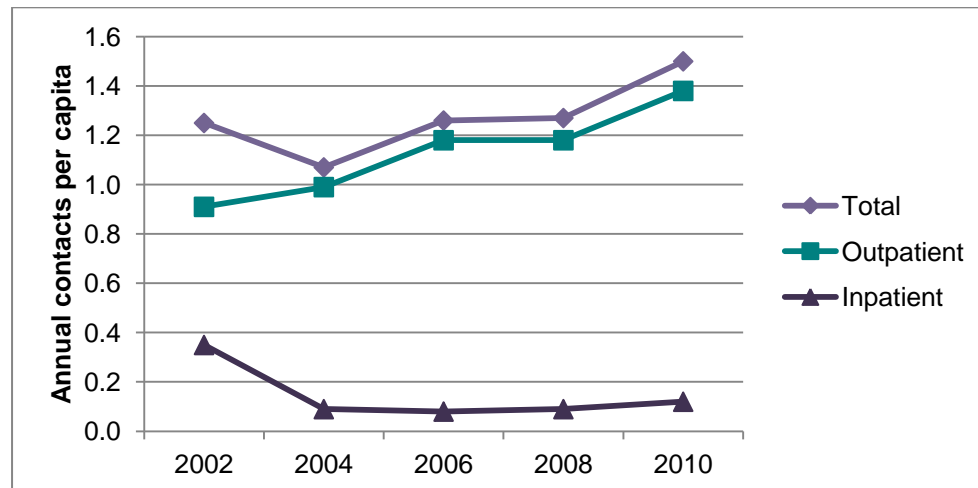


Note: LMIC=Lower middle income country; UMIC=Upper middle income country; HIC= High income country

Source: Tangcharoensathien V et al, 2011 [154]

Findings from data analysis of five rounds of the Vietnam Household Living Standard Surveys (VHLSS) from 2002 to 2010 show that the number of households using health services and out-of-pocket payments have increased over time (Figure 17, Table 5). Since 2002, the share of out-of-pocket expenditures for inpatient and outpatient care have been about equal at approximately 40 per cent each. Other health spending such as purchasing drugs and medical consumables without prescription and inviting doctors for home-examination and treatment represented a lower share (about 20 per cent of total out-of-pocket expenditures).

**Figure 17: Annual health service contacts per capita, 2002~2010**



Source: World Health Organization, Hanoi Medical University, 2012

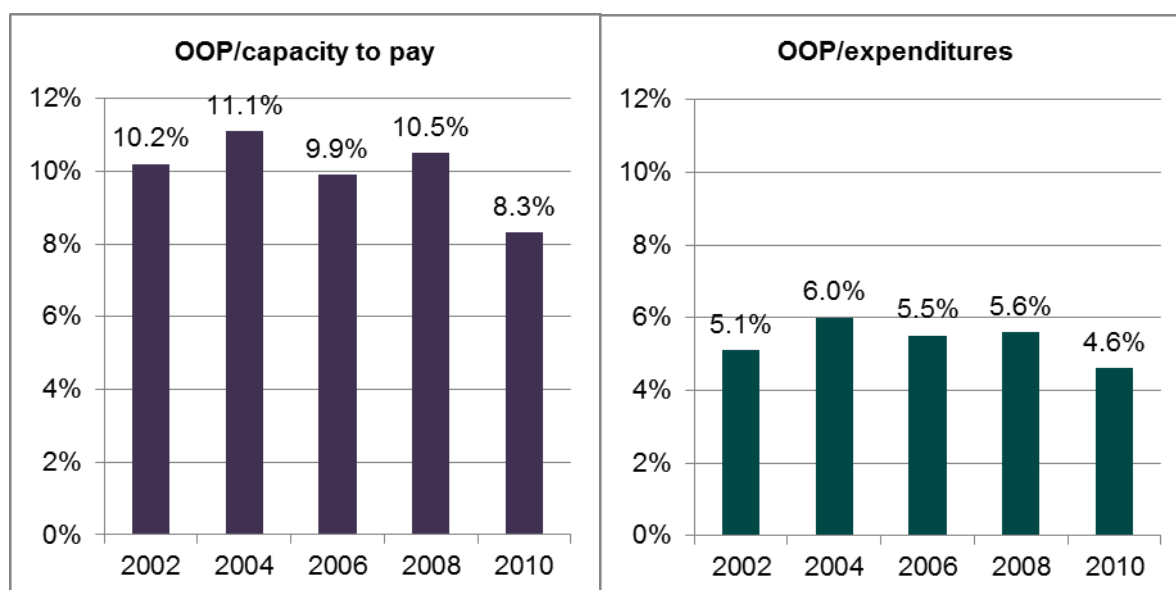
**Table 5: Average monthly out-of-pocket health payments per household (current and constant 2010 prices), 2002~2010**

Year	Monthly OOP payments in current prices (1000 VND/month)	Monthly OOP payments in constant 2010 prices (1000 VND/month)
2002	67.3	119.7
2004	126.4	175.4
2006	140.0	175.9
2008	201.3	220.8
2010	243.0	243.0

Note: Constant prices are current prices adjusted using the consumer price index for drugs and medical services. OOP=out-of-pocket

Source: World Health Organization, Hanoi Medical University, 2012 [155]

Out-of-pocket expenditures account for 8.3 to 11.1 per cent of capacity-to-pay and 4.6 to 6.0 per cent of total household expenditures. Even though these out-of-pocket spending shares have begun to decline in recent years, out-of-pocket health expenditures remain at high levels (Figure 18).

**Figure 18: Out-of-pocket payments compared with capacity-to-pay and total households expenditure, 2002–2010**

Source: World Health Organization, Hanoi Medical University, 2012 [155]

Table 6 shows that the share and absolute number of Vietnamese households suffering from catastrophic health expenditures and impoverishment due to health expenditures over the period 2002–2012 were relatively high. The share of Vietnamese households facing catastrophic health expenditures in 2002 was 4.7 per cent, increased to and remained above 5 per cent from 2004–2008 then declined to 3.9 per cent in 2010. In absolute terms, the number of Vietnamese households facing catastrophic expenditures in 2002 was 811 499, increasing to over 1 million from 2004–2008 then declining to 862 661 in 2010. The share and absolute number of Vietnamese households facing impoverishment due to health care spending started at 3.4 per cent of all households in 2002, increased to 4.1 per cent in 2004, then stabilized and fell to 2.5 per cent of all households in 2010, which in terms of total households indicates fewer households impoverished due to health spending in 2010 compared to 2002 [156].

**Table 6: Current situation of catastrophic health expenditure and impoverishment due to health spending in Vietnam, 2002–2010**

Year	Catastrophic expenditures		Impoverishment	
	Households	Proportion	Households	Proportion
2002	811 499	4.7	590 446	3.4
2004	1 055 910	5.7	769 505	4.1
2006	1 096 177	5.1	667 863	3.1
2008	1 151 500	5.5	742 587	3.5
2010	862 661	3.9	563 785	2.5

Source: World Health Organization, Hanoi Medical University, 2012 [155]

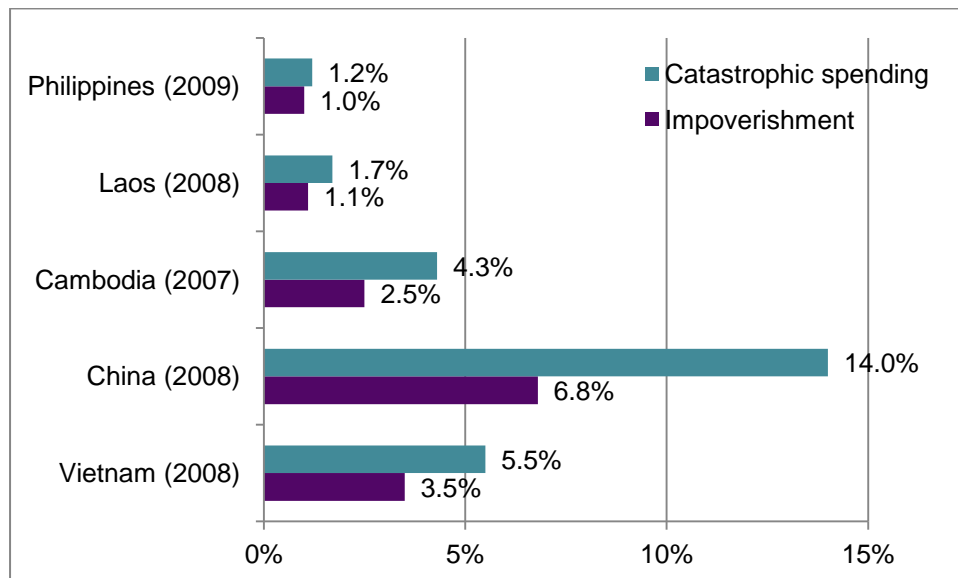
What is most notable in the above patterns is the dramatic decline in the share and absolute number of households suffering from catastrophic expenditure and impoverishment in 2010 compared to 2008 and previous years.

The proportion of Vietnamese households facing catastrophic health expenditure and impoverishment is relatively high compared to other countries in the region. Figure 19 shows that rates of catastrophic spending and impoverishment due to health spending in Vietnam,



although lower than in China, are nevertheless higher than other Southeast Asian nations like Cambodia in 2007 (catastrophic: 4.3 per cent; impoverishment: 2.5 per cent) [157], Laos in 2008 (catastrophic: 1.7 per cent; impoverishment: 1.1 per cent) [158] and the Philippines in 2009 (catastrophic: 1.2 per cent; impoverishment: 1 per cent) [159]. Several studies indicate that the proportion of households facing catastrophic spending in Vietnam in 1998 was 10.5 per cent, which was the highest of 59 countries covered in those studies [149, 160, 161].

**Figure 19: Catastrophic spending and impoverishment due to health spending in selected Asian countries, 2007~2009**



Source: World Health Organization 2011

## 1.2. Factors affecting out-of-pocket payments, catastrophic expenditure and impoverishment due to health care spending in Vietnam

This section analyzes determinants of household out-of-pocket spending, catastrophic health spending and impoverishment due to health expenditures and provides some rough assessments of the causes of the current situation to serve as the basis for making recommendations on solutions for reducing household out-of-pocket health expenditures.

Statistical data indicate that although we observe lower out-of-pocket expenditures for uninsured, rural and poor households (Table 7), their shares of catastrophic expenditure and impoverishment due to health spending are higher (Tables 8 and 9). Catastrophic expenditure and impoverishment due to health spending still occur in households where at least one member has health insurance. The proportion of households facing catastrophic spending is highest in the poorest living standards quintile. Impoverishment due to health spending has seen a slight decline among the poorest households, yet it is quite high among the near poor. Households belonging to the third quintile (middle income group) still suffer from catastrophic health spending and impoverishment.

**Table 7: Average monthly out-of-pocket spending per household by household characteristics, 2002~2010**

(Unit: VND)

	2002		2004		2006		2008		2010
	Current prices	Constant 2010 prices	Current prices	Constant 2010 prices	Current prices	Constant 2010 prices	Current prices	Constant 2010 prices	
Households with at least one member insured									
None insured			106 500	147 762	120 100	150 928	154 500	169 497	200 500
At least one insured			108 700	150 814	122 100	153 441	183 300	201 093	237 400
Residence									
Rural	57 700	102 636	90 400	125 424	102 200	128 433	150 800	165 438	208 300
Urban	92 200	145 401	156 500	217 134	170 200	213 888	248 500	272 622	285 800
Socio-economic groups									
Poorest	20 900	27 543	28 400	39 403	34 900	43 858	53 800	59 022	69 200
Near poor	34 300	43 104	53 700	74 505	58 800	73 893	93 000	102 027	130 600
Average	51 400	61 400	80 000	110 995	88 900	111 719	135 100	148 214	190 400
Above average	74 800	82 061	111 100	154 144	139 400	175 182	188 500	206 798	287 900
Richest	148 900	154 027	266 500	369 752	286 700	360 292	420 400	461 208	481 500

Note: Adjustment to real 2010 prices using medical CPI from GSO

Source: World Health Organization, Hanoi Medical University, 2012 [155]

**Table 8: The proportion of households facing catastrophic spending by household characteristics, 2002~2010**

	2002	2004	2006	2008	2010
<b>Households with at least one member insured</b>					
None insured	-	8.0%	7.6%	6.9%	5.5%
At least one insured	-	4.4%	4.5%	5.2%	3.6%
<b>Residence</b>					
Urban	1.9%	3.1%	3.0%	3.1%	2.7%
Rural	5.6%	6.6%	5.9%	6.4%	4.4%
<b>Socio-economic groups</b>					
Poorest	5.5%	5.5%	6.9%	7.8%	4.7%
Near poor	4.6%	6.1%	4.6%	6.0%	4.5%
Average	4.7%	6.4%	4.6%	5.5%	4.1%
Above average	5.0%	5.5%	5.2%	4.5%	3.4%
Richest	3.6%	4.9%	4.3%	3.6%	2.5%

Source: World Health Organization, Hanoi Medical University, 2012 [155]

**Table 9: Proportion of households impoverished due to health spending by household characteristics, 2002~2010**

	2002	2004	2006	2008	2010
<b>Households with at least one member insured</b>					
None insured	-	5.9%	4.6%	4.5%	4.2%
At least one insured	-	3.1%	2.7%	3.3%	2.2%
<b>Residence</b>					
Urban areas	0.7%	1.2%	0.9%	1.1%	0.8%
Rural areas	4.3%	5.2%	4.0%	4.5%	3.3%
<b>Socio-economic groups</b>					
Poorest	4.6%	6.2%	5.1%	7.5%	5.4%
Near poor	11.1%	12.1%	9.0%	8.6%	6.0%
Average	1.0%	2.2%	1.0%	1.5%	0.7%
Above average	0.4%	0.2%	0.3%	0.1%	0.4%
Richest	0.1%	0.0%	0.2%	0.0%	0.1%

Source: World Health Organization, Hanoi Medical University, 2012 [155]

Recent studies also indicate that non-communicable and chronic illnesses are linked to increases in catastrophic spending and impoverishment due to health spending. A 2010 study in Thai Nguyen found that households with a member facing chronic illness had a 3.2 times higher risk of catastrophic spending and 2.3 times higher risk of impoverishment due to health spending compared to other households. This study also indicated that health insurance had a clear impact on protecting households from catastrophic spending and impoverishment due to health spending [162]. Another study implemented by the Hanoi School of Public Health in 2012 also found that 54 per cent of households who had a member stricken with cancer had to face catastrophic spending [163].

The above analysis indicates that the household out-of-pocket share of total health expenditures and the proportion of households facing catastrophic spending and impoverishment in Vietnam had begun to decline in 2010 compared with previous years. The analysis also showed that the health insurance share of total health spending and the frequency of health services utilization are seeing increasing trends. This positive change can be attributed to the impact of recent social and health policies in Vietnam, especially the policy on health care for the poor and children under aged six, subsidies for medical treatment of social welfare beneficiaries and the Law on Health Insurance (which came into effect in July 2009). The Law on Health Insurance provides favorable conditions for all of the poor and a significant number of the near poor to obtain health insurance coverage. This Law also provides incentives for dependents of people holding health insurance cards to also participate in health insurance (See Chapter IV, Section 3: Health insurance development).

Nevertheless, the findings also reveal that the out-of-pocket expenditure share of total health expenditure, the proportion of households facing catastrophic spending and impoverishment in Vietnam are all higher than the figures in other countries in the region and in the world, which is a major challenge for Vietnam as it strives towards UHC. More than 30 per cent of Vietnamese people, mainly the near poor and self-employed rural population don't have health insurance. In 2009, health insurance coverage in Vietnam (population coverage) had reached 64 per cent, yet the share of total health expenditures from health insurance only reached 18 per cent [11]; a result that reflects the fact that health insurance is

not intended to cover preventive medicine or high costs of private health services and the state is still directly subsidizing state health facilities. According to a 2006 study, health insurance in Vietnam did help to reduce out-of-pocket health spending, but only by about 16–18 per cent [164]. This figure is relatively modest compared to expectations of the financial protection potential of health insurance.

At present, catastrophic spending and impoverishment due to health spending still occur among households with members enrolled in health insurance. This indicates that the financial protection impact of health insurance has not met expectations. Some studies conducted in Vietnam several years ago also showed that health insurance only has a relatively “modest” impact on reducing out-of-pocket spending [165-169]. Below are possible reasons for this situation:

- People with voluntary health insurance or health insurance for the poor are less likely to use their health insurance when seeking inpatient care compared to people with compulsory health insurance [170]. Research suggests that the reason for this is related to lower contributions to health insurance, which medical facilities translate into lower quality services or longer waiting times.
- The Law on Health Insurance stipulates co-payments for almost all insured people, yet co-payments create a financial burden for low income groups. Health services within the scope of health insurance reimbursement are limited and the people still have to pay for services excluded from the insurance list.
- Direct non-medical spending for people seeking medical care, such as transportation, food and accommodation for patients and their family members and unofficial expenses (e.g. gifts) can amount to large sums of money unaffordable to many households.
- Fee-for-service payments, administratively set user fees for medical services (Circular No. 04/2012/TTLT-BYT-BTC), and the operational and financing mechanism for state health facilities (Decree No. 85/2012/ND-CP) have facilitated health facility development of additional hotel services to respond to demand for high class services among some groups, but also led to increased service fees collected directly from patients. Abuses such as extra billing and balance billing in hospitals in Vietnam have also been mentioned in several studies [171, 172].
- The higher proportion of catastrophic spending and impoverishment among rural and near poor households indicates that health financial protection policies are inadequate.
- In the coming years, the impact of medical cost inflation, together with an increase in non-communicable diseases, the development of high technology medicine, the expansion of private health services (not generally covered by health insurance) will also result in increased out-of-pocket spending. Meanwhile, there is evidence that Vietnam does not have a financial protection mechanism for users of private health care facilities and pharmacies [171].
- The preventive medicine system in Vietnam remains underdeveloped due to a lack of attention and investment, creating a burden for the health system and leading to an increase in treatment costs as mentioned in Chapter III.

### 1.3. Recommendations

In order to achieve the goal of universal coverage, Vietnam needs to implement a consistent set of measures aimed at reducing the out-of-pocket share of total health spending to less than 30–40 per cent, as recommended by WHO.

- A long-term plan for Vietnam is to develop a health financing system based on the combination of the budget from tax revenue and social health insurance. WHO also recommends that health insurance coverage needs to reach 90 per cent of the population to ensure universal coverage [152].
- The main solution to gradually reducing out-of-pocket spending is to effectively implement existing policies on further expanding health insurance coverage; reforming and widely applying improved provider payment mechanisms; effective implementation of Prime Ministerial Decision No. 14/2012/QĐ-TTg dated 1 March 2012 on revisions and amendments to articles of Prime Ministerial Decision No. 139/2002/QĐ-TTg dated 15 October 2002 on health care for the poor.
- There is a need for continuous and in-depth research on the issue of household out-of-pocket spending to better understand the underlying causes and risk factors. There is also a need for research on out-of-pocket spending of specific vulnerable groups, such as ethnic minorities and people with disabilities.

## 2. Financial protection for disadvantaged and vulnerable groups

### 2.1. Situation assessment

#### 2.1.1. An overview of policy implementation

For the last twenty years, policies on health financial protection for the disadvantaged and vulnerable and other priority groups have been developed and extended including support for meritorious people who have contributed to the nation, the poor, the near poor, ethnic minority people (living in disadvantaged areas), children under age six, the elderly, people with disabilities and migrants (mainly rural to urban).

Before the 1990s health care was subsidized by the Government so support for health care of vulnerable groups was not necessarily required. However, these groups have faced difficulty in accessing health services since policies have been implemented to charge partial user fees (1989), permit private health care facilities to operate (1993) and allow markets to determine pharmaceutical prices. In order to mitigate potential barriers to access in this situation, Government Decree No. 95/CP dated 27 July 1994 on collecting partial users fee listed a number of beneficiaries entitled to exemption from user fees.<sup>5</sup> Several legal documents were issued to adjust and extend entitlements to this user fee exemption. However, the actual exemptions stipulated in Decision 95 was limited due to lack of funding to reimburse costs of facilities granting exemptions. The value of exemptions compared to total hospital costs only amounted to about 4 per cent [173]. Different methods of providing financial support such as unfunded exemptions or reductions in user fees and free charity hospitals were not sustainable solutions.

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<sup>5</sup> These groups included: a) people with disabilities, orphans, elderly without support; b) children under age six; c) people suffering schizophrenia, epilepsy, leprosy and tuberculosis; d) patients residing in communes recognized as mountainous by the Committee for Ethnic Minorities and Mountainous Areas; e) people clearing land and developing new economic zones for a period of 3 years from arrival; g) extremely poor patients.

Due to various disadvantages and shortcomings of these financial protection policies, on 15 October 2002 the Prime Minister issued Decision No. 139/2002/QĐ-TTg on health care for the poor. This was a very important policy with much greater population coverage compared to previous policies, including all the poor with income below the poverty line, residents of Program 135 communes and ethnic minority people living in the Central Highlands and six particularly disadvantaged Northern mountains provinces [174-176]. Provincial People's Committees set up health care fund for the poor. This fund was initially used to purchase health insurance cards for the poor with the annual premium of 50 000 VND per person or to reimburse medical facilities for health care services provided to Decision 139 beneficiaries. It could also be used to provide some support to pay costly health care expenses due to severe illness treated at state health facilities for groups like the poor, homeless, people without means of support.

After a short period of implementation, the advantages of subsidizing health insurance for these groups were recognized. The Government decided that all Decision 139 beneficiaries should be covered by compulsory health insurance fully subsidized by the state budget (Decree 63/2005/ND-CP), with a relatively comprehensive set of medical benefits and no co-payments.

According to the Law on Health Insurance that came into effect on 1 July 2009, members of poor households and ethnic minorities living in disadvantaged regions are entitled to state budget subsidies to pay the full health insurance premium, while the near poor were entitled to a 50 per cent subsidy to the health insurance premium.

On 1 March 2012, the Prime Minister issued Decision No. 14/2012/QĐ-TTg revising and amending some articles in Decision 139 on health care for the poor to be more relevant with the current situation, stipulating expansion of beneficiaries eligible for health care subsidies including: beneficiaries of monthly social assistance payments, people residing in state social protection centers, people with cancer, kidney dialysis, heart surgery or other diseases causing financial difficulties due to high health expenditures unaffordable to the patient. According to Decision 14, in addition to support for treatment costs, patients among eligible beneficiary groups are also entitled to payments to cover costs of food and transportation. This policy creates hope and healthcare options for the disadvantaged and people with severe illness. The Ministry of Health and Ministry of Finance are completing a draft joint circular guiding the implementation of financial support under this decision, which is expected to be issued in 2013 [177].

In order to encourage the nearly 1.5 million people living in near poor households to enroll in health insurance [178], the Prime Minister issued Decision No. 797/QĐ-TTg in 2012, increasing the minimum health insurance subsidy for near poor households from 50 per cent to 70 per cent starting in the 2012 fiscal year. According to this Decision, the state budget will need to provide estimated subsidies equivalent to over 2.38 trillion VND per year.

According to the Law on Child Protection, Care and Education (2004), all children under age six are entitled to free medical examination and treatment at state health care facilities. Government Decree No. 36/2005/ND-CP dated 17 March 2005 stipulates the implementation of specific articles of the Law on Child Protection, Care and Education. Circulars of Ministry of Health and Ministry of Finance were issued [179], stipulating that children under age six are to be provided with free health care cards. In 2005, over 9 million children under age six were issued these cards. Nevertheless, due to procedural shortcomings, health care expenditures for many children under age six were not reimbursed, while the child healthcare fund surplus was over 200 billion VND [180]. According to the Law on Health Insurance, from 1 October 2009 children under age six should be issued free health



insurance cards (without co-payment requirements) instead of free healthcare cards when utilizing health care services at public facilities.

Regarding the elderly, the Law on the Elderly (2009) stipulates prioritization for the elderly to receive medical services, encourages organizations and individuals to provide free health care for the elderly (Article 12) and calls for organizing periodic health check-ups for the elderly paid from the state budget (Article 13). The Government issued Decree No. 06/2011/ND-CP dated 14 January 2011 regulating and guiding the implementation of certain articles in the Law on the Elderly. The Ministry of Finance issued Circular No. 21/2011/TT-BTC dated 18 February 2011 regulating the management and utilization of PHC funds for the elderly where they live. The Ministry of Health issued Circular No. 35/2011/TT-BYT dated 5 October 2011 guiding the implementation of health care for the elderly. In particular, the national action program on the elderly in the period 2012–2020 [181] sets out the target of 1.5 million elderly to benefit from monthly social assistance payments or to be taken care of at elderly care facilities by 2015. Over 25 per cent of communes, wards and towns have supported the establishment and operation of health care funds and have promoted the role of the elderly in localities where they live. This decision also specifies activities to care for the health of the elderly.

The above financing policies have contributed to the implementation of important orientations for health financing reform in Vietnam, for example, “gradually shifting away from supply-side subsidies covering recurrent costs of health care facilities towards demand-side subsidies for health service users through state payment of health insurance premium” [182]; “The State ensures implementation of direct support policies for people who have made meritorious contributions to the nation, the poor and ethnic minorities so that they can access and benefit from basic public services of increasing quality” [183].

Along with financing policies for the above groups, the State has also implemented a series of policies and programs on poverty reduction and support for socio-economic development in disadvantaged areas, which has contributed substantially to health financial protection.

### **2.1.2. Financial protection for the poor, near-poor and ethnic minorities**

#### **Achievements and progress**

The state budget allocation for the health care fund for the poor has increased over time in terms of the norms per person and the actual payments to health care providers for services. (Table 10).

**Table 10: Total state budget allocation, subsidy per card and total insurance reimbursement per card for the poor and near poor, 2003–2011**

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 (prel.)
Total funding (billion VND)	522.4	717.6	784.4	1020.7	1173.1	2217.8	3276.3	5042	6157	7086
Average contribution per card (1000 VND)	50	53.4	54.7	60	80	130	130	4.5% of minimum wage		
Healthcare payments for the poor and near poor (billion VND)	..							2979	4061	5161

Source: Report on implementation of Decision 139 to the Ministry of Health and VSS from the provinces.

While waiting for legal documents guiding implementation of Prime Ministerial Decision No. 14/2012/QĐ-TTg, some localities have provided the poor support to cover transport costs from home to hospital, food and other costs not covered by health insurance using funds from external assistance projects.

Enrollment of the poor and other disadvantaged groups is quite high (Table 11). The healthcare fund for the poor and health insurance for the poor have had the impact of reducing out-of-pocket payments substantially for both inpatient and outpatient care [184–187].

**Table 11: Health insurance coverage among the poor and other disadvantaged groups, 2011**

Groups	Population size	Covered by insurance	Coverage rate
The poor, ethnic minorities	15 140 401	15 140 401	100.00
Social assistance beneficiaries	916 916	695 442	75.85
Near poor	6 400 000	1 616 912	25.26

Source: Financial settlement report of VSS, 2011.

### Difficulties and shortcomings

With its limited budget, the State has only been able to subsidize direct treatment costs of medical treatment (drugs, blood, IVs, medical consumables). Payments for non-medical costs of seeking medical care (accounting for 40–50 per cent of total health care expenditure) have not yet been supported (except for provinces with external assistance projects) [188, 189]. This shortcoming is partly due to a lack of legal documents guiding the implementation of financial support and partly due to weak communication to beneficiaries and health workers. Meanwhile, several external assistance projects have experienced a slow disbursement rate due to a number of reasons such as unsuitable regulations on expenditures and complicated payment procedures [190].

The issuing of health insurance cards to the poor is hindered by delays in the poverty assessment process in some localities, duplicate health insurance coverage for some individuals, errors in printing health insurance cards, with negative consequences for the poor in need of using medical services [191, 192].

Although the State provides a generous subsidy for health insurance premiums, the proportion of the near poor participating in health insurance has only reached 25 per cent (Table 11), and many participate on an individual rather than household basis. The main reasons for this is low awareness of the poor about their rights and obligations and how to use health insurance cards to pay for medical care. The household premium contribution amount remains relatively high (30 per cent of the premium with the 70 per cent subsidy), while the co-payment of 20 per cent at time of healthcare seeking and lack of stop loss provisions to cap total co-payments limits the potential benefits, make health insurance a less attractive option for the near poor to avoid catastrophic health spending [192].

About 30 per cent of people with health insurance for the poor still face high healthcare costs [193, 194]. Co-payments (5 per cent for the poor) still cause financial hardship because of their low ability to pay: for example if they need kidney dialysis, over 1 year a poor person would have to pay 4–5 million VND in co-payments [191]. Because the amount of financial protection is still inadequate, people facing financial difficulties are likely to delay seeking care until their health problems become severe.

Medical service utilization rates among the poor and near poor remain low, so the outlays from the health insurance fund for them are only about 75 per cent of the funds contributed to enroll them in health insurance, and in some regions as low as 40–60 per cent. In 2010, on average each poor insured person had only 1.62 health service contacts per year, which is lower than the average of all insured people at 2.02 contacts, and much lower than among the voluntary insured (3.04 contacts per year). In 2011, the frequency of health care contacts among the poor with insurance fell to only 1.26 times, lower than the overall average of 1.9 contacts per year [191].

Health care costs are rising, leading to disadvantaged groups having to borrow or reduce their food consumption in order to have funds to pay for medical care. Results of a recent study showed that compared to the non-poor households, poor households had a 4 times higher risk of having to reduce food consumption and a 5 times higher risk of having to borrow money to pay for high inpatient and outpatient treatment costs [195].

Monitoring and evaluating the results and impacts of health financial protection policies have not been implemented in a systematic way.

### **2.1.3. Financial protection for children under age six**

#### **Achievements and progress**

Allocation norms from state budget for the health care fund for children under age six have gradually increased from 75 000 VND per child in 2005 to 108 000 VND per child in 2007 to 130 000 VND per child in early 2008 [196] and now 4.5 per cent of the minimum wage. Families with children aged 4–5 face lower out-of-pocket payments and lower risk of catastrophic expenditures than families with children aged 6–7 years [197].

#### **Difficulties and shortcomings**

The implementation of issuing health insurance cards for children under age six is still ineffective. In 2011, approximately 19.7 per cent [20] of children under age six had not been issued health insurance cards, particularly ethnic minority children and children with temporary household registration cards [198]. This situation can be attributed to weak inter-sectoral collaboration in listing the number of children needing health insurance cards; home births for children living in ethnic minority, mountainous and remote areas led to delays in issuing birth certificates or registering these births in household registration books and the

lack of a legal basis for them to be issued health insurance cards [20]; reluctance of some families to request health insurance cards for their children because they can simply use the birth certificate for payments. This situation is quite common, leading to difficulty in card management, settlement and insurance fund management.

For children under age six, if the health insurance card is only provide for children up to 72 months of age, some children are still left without coverage if their cards expire before September when they enter first grade, creating an insurance gap if the parents don't register their children for insurance under some other insurance category.

Policy communication to beneficiaries remains ineffective. Only about two-thirds of parents with children under age six have ever heard of free health insurance for children. Only half of parents issued health insurance for their children have been given information about use of the health insurance cards or facilities where they can register for first level care [198].

The overcrowding of pediatrics patients in central and provincial hospitals, health insurance fraud, long waiting times, prolonged treatment episodes and inequalities in service use persist [199]. Children under age six in better-off households have a higher level of health services utilization than those in poor households [200].

#### **2.1.4. Financial protection for the elderly**

The elderly are one of the most vulnerable groups. The share of the elderly in the population continues to increase, from 6.9 per cent in 1979 to nearly 10 per cent in 2009 and this share is projected to reach 11.2 per cent by 2020 and 28.5 per cent by 2050, placing Vietnam third in ASEAN in terms of elderly population share, behind only Singapore (39.8 per cent) and Thailand (29.8 per cent) [201].

In the context of changing morbidity patterns in Vietnam towards increases in chronic disease, [202], the demand for health services for the elderly and related costs have increased, leading to high risk of impoverishment [155]. Lack of effective financial protection mechanisms not only lower quality of life, but also lead the elderly and their families to financial difficulties [201].

#### **Achievements and progress**

Currently 1.43 million elderly are benefitting from monthly social assistance payments in communities and social protection centers [203].

According to Prime Ministerial Decision No. 117/2008/QĐ-TTg, the age at which the elderly are entitled to benefit from the policy on social assistance policy, including health insurance, was reduced from 90 to 85 years, and in 2009 the Law on the Elderly reduced it to 80 years. According to this regulation, the number of elderly beneficiaries of financial support is estimated at more than 400 000 people. The Law on the Elderly came into effect in January 2010 and stipulates that people aged 80 and older who are not pensioners or receiving other monthly social assistance payments, are entitled to health insurance paid from the state budget. Funds for the poor and financing policies on PHC for the elderly have assisted the elderly, particularly the poor elderly, to access health services at the commune level without increasing their health expenditures (the elderly are financially protected) [204].

#### **Difficulties and shortcomings**

In 2010, although the Law on Health Insurance was issued and had come into effect since 2009, approximately 26 per cent of the elderly had no form of health insurance. Among

this population, the uninsured share of the elderly was highest in the central region [205]. The Law on Social Insurance does not yet stipulate that the social insurance fund should contribute to health insurance for the elderly receiving monthly death benefits.

Subsidizing and distributing health insurance cards to the elderly 80 years and older has been implemented slowly. Organization for implementation of the Law on the Elderly and health care policies for the elderly face difficulties due to: (i) Untimely and unclear legal documents guiding implementation; (ii) lack of inter-sectoral collaboration in implementing policies; (iii) inadequate communication about legal documents relating to policies at commune levels; (iv) lack of budget, human resources and awareness of policies in most localities.

#### **2.1.5. Financial protection for people with disabilities**

The findings from Census of Population and Housing (1 April 2009) indicate that 7.8 per cent of the population over age five (equivalent to 6.1 million people) face difficulty in performing at least one of four functions including seeing, hearing, moving and concentrating or remembering. Among these people, 385 000 have serious disabilities and cannot perform at least one of the above functions. In reality, the proportion of the population with disabilities is likely to be higher because other types of disabilities were not covered in the Census.

People living with disabilities tend to have worse living conditions and lower living standards than able-bodied people. According to the 2009 Census, only 15.4 per cent of people with disabilities belong to the 20 per cent richest group compared to 21.1 per cent of able-bodied people. In contrast, the proportion of all people with disabilities living in households with the worst living conditions and lowest living standards was higher than the able-bodied [206]. A recent study also shows a close relationship between disability and poverty [207]. This confirms a need for effective financial protection policies for people with disabilities.

#### **Achievements and progress**

According to an estimate by the Ministry of Labor, Invalids and Social Affairs, nationwide some 50.4 per cent of households with a member who has disabilities have benefited from health support policies. Among those, approximately 40 per cent receive free health care and 45.4 per cent obtained health insurance cards.

Community-based rehabilitation has been implemented in 46 provinces, serving 74.1 per cent of people with disabilities in these localities [208]. The Ministry of Health and some NGOs have carried out programs supporting people with disabilities through surgery and rehabilitation services [209].

#### **Difficulties and shortcomings**

About 50 per cent of the disabled face difficulty in accessing health care services. The main cause is high treatment costs, followed by a lack of suitable means of transportation, long distance, bureaucracy, shortage of adequate services and discrimination [210].

A recent study [211] in one district indicates that the proportion of people with disabilities receiving official and unofficial assistance may be lower than reported. Some 9 per cent of people with disabilities in general and 18 per cent of people with severe disabilities received income and health care support, assisting devices, gifts and moral support. Only 5 per cent of people with severe disabilities received income support from the government and only 6 per cent received free health insurance cards despite their relatively

high demand for health services in provincial and central hospitals, with associated high costs.

Vietnam signed the United Nations Convention on the Rights of Persons with Disabilities in 2008 and issued the Law on People with Disabilities in 2010. However, people with disabilities still do not have easy access to health services suitable for their special needs [212].

### **2.1.6. Financial protection for rural-urban migrants**

#### **Achievements and progress**

Recently the government has made improvement to the legal framework with the objective to improve rural-urban migrant living standards and health. Vietnam has signed and approved certain international conventions and declarations relating to internal economic migrants. There are many rights enshrined in these conventions and declarations, among these is the “right to the highest attainable standard of mental and physical health” [213].

#### **Difficulties and shortcomings**

Beneficiaries of the cash assistance policy to support health care are limited and there is no comprehensive coverage for disadvantaged migrants. Almost all households facing unexpected risks such as illness or accidents that lead them to face financial difficulties do not receive monthly assistance payments. A majority of migrants have no access to subsidies at their temporary residence. A number of migrants are eligible for cash assistance but do not fully understand policies and procedures and cannot prepare legal documents to apply for this assistance on their own or are afraid of dealing with administrative units [214].

Poverty status of migrants (particularly of those working in the informal sector) is more severe, as is evidence in several dimensions: high cost of living, job insecurity, lack of social integration, limited access to public services and less convenient and secure living conditions. These have a heavy influence on their health in the short and long-term, and affect their ability to take care of their health and welfare [213].

Rural-urban migrants usually have to pay more for health services due to lack of health insurance coverage [215]. The children of unregistered migrants (KT4) or of those without household registration are usually not insured [213]. Many migrants avoid using expensive health services and choose to purchase drugs for self-treatment at home instead [216].

### **2.1.7. Implementation of health support projects for disadvantaged provinces, the poor and other disadvantaged groups**

Many health assistance projects being implemented consist of health financing and health insurance components mainly focusing on the following aspects: support of the goals of universal health insurance coverage, support for the near poor to participate in health insurance and support for non-medical costs and high costs of people suffering severe illness for Decision 139 beneficiaries [217]. Recently, projects supporting disadvantaged areas, the poor and other disadvantaged groups have been implemented using ODA or NGO funds, including health support for the poor in the Northern Mountains and Central Highlands (HEMA) [218], Northern Mountains Health Support Project, North Central Coast Health Support Project, Strengthening healthcare services in the Northwest provinces, Strengthening support for people with disabilities...[219]. These projects will strengthen resources to improve health capacity at grassroots levels and increase accessibility to health care services for residents in rural areas, particularly in disadvantaged regions.



### **2.1.8. Integrating health care policies for the poor and residents of disadvantaged areas with socio-economic policies**

#### **Implementing policies on reducing poverty according to the Decision No. 135**

In order that poor households have many opportunities to benefit from economic achievements, the government has issued and implemented programs for poverty reduction and support for ethnic minorities and residents of remote and isolated areas. This is the program for socio-economic development of mountainous, remote and isolated communes in difficult circumstances (approved by the Prime Minister according to Decision 135/1998/QD-TTg dated 31 July 1998); The Program for Socio-economic development of communes in difficult circumstances in ethnic minority and mountainous areas for the period 2006–2010 (Program 135 Phase II was approved by the Prime Minister with Decision No. 07/2006/QD-TTg dated 10 January 2006) [220]. In 2008, the Government discussed and resolved to implement a program to support rapid and sustainable poverty reduction to the year 2020 for the 61 (now 62) poorest districts, in 20 provinces, with poverty rates of over 50 per cent (Resolution No. 30/a/2008/NQ-CP) [221]. Program 135 Phase II was designed with four main components, among those is improving the quality of social and cultural life and increasing accessibility to public services. The total budget for this program from 2006 to 2010 was 1.1 million USD. These programs have contributed considerably to financial protection in health care of people in remote areas.

Based on results of an impact evaluation of Phase II of Program 135 and the current situation, on 4 April 2013, the Prime Minister issued Decision No. 551 approving Program 135 investment support for infrastructure and support for production in disadvantaged communes, border communes, and disadvantaged villages for the period 2014–2015 and 2016–2020.

However, the program only partly achieved the goals set out. The rate of poverty fell from 57.5 per cent to 49.2 per cent, but has not met the target of reducing poverty to 30 per cent. Only 41 per cent of households have achieved average annual income per capita higher than 3.5 million VND whereas the target was 70 per cent. There was a big difference in achieving the targets among ethnic minority groups. While there was a substantial improvement in terms of increasing income and sustainably reducing poverty among Tay, Nung, Dao and H'mong ethnic people, however performance among other ethnic groups, particularly the Thai, was lower. Thus, in the future there should be more financing programs with better design focusing on specific conditions, characteristics, demand and cultural features of each ethnic group [222].

#### **Implementing the National Target Program on Building the New Countryside**

National benchmarks for the new countryside (issued under Prime Ministerial Decision No. 491/QD-TTg dated 16 April 2009) and the National Target Program on Building the New Countryside for the period 2010–2020 (according to Prime Ministerial Decision No. 800/QD-TTg dated 4 June 2010) both mention the tasks of developing healthcare, specifically: “Complete the system of facilities to achieve standardization in health care in the commune. By 2015, 50 per cent of communes should meet national benchmarks and by 2020 75 per cent of communes should meet national benchmarks” as part of component 2 of the National Target Program related to development of socio-economic infrastructure; and component 7 in the project on “Development of healthcare for the rural population”, through continuing to implement the National health target programs, and meeting the requirements of the national benchmarks for the new countryside [57].

After two years of implementation, particularly in 2012, localities have strongly implemented the program. Awareness among civil servants and the general population has shown a positive trend and the program is gradually becoming deeply entrenched nationwide. Many localities actively mobilized local resources to implement specific goals of the program. Up till now, 68 per cent of all communes have approved master plans. Some provinces such as Tuyen Quang, Thai Binh, and Ha Tinh are pioneers in building a new countryside by using pro-active and innovative methods. Several organizations have also participated in campaigns for implementing specific contents of the National Target Program on Building a New Countryside 2010–2020 within their jurisdiction.

Besides these achievements, problems such as delays in completing, amending and issuing policies and mechanism among ministries, sectors and localities still exist. Progress in implementing the master plan in the South Central Coast, Southeast and Northern midlands and mountains has been slow. Many master plan projects have been approved, but quality is low: the plans are inadequately detailed and lack feasibility. Mobilization of adequate resources for implementing the program is facing difficulty. Some localities have favorable human resources but program implementation is still ineffective.

## 2.2. Priority issues

- Health insurance coverage for groups including the near poor, the elderly, people with disabilities and migrants (particularly those working in the informal sector) remain at a low level. The issuing of health insurance cards to the poor, ethnic minorities and people aged 80 and older and children under age six has been slow. Utilization of medical services reimbursed by health insurance among the poor, near poor and ethnic minorities, particularly in disadvantaged areas and mountains, remains low.
- Support for payment of direct non-medical costs (transport, food) has still not yet been implemented for the poor and other groups facing difficulties (except for a few provinces with external assistance projects). The number of people benefitting remains low, and not all groups in difficulty who need assistance are covered.
- Policy communication to beneficiaries and providers is still weak. Thus, these groups are still not fully aware of their rights and obligations. This negatively affects financial protection for the poor and other disadvantaged groups.
- There is a lack of inter-sectoral collaboration in implementing financial protection policies for the poor, ethnic minorities and other disadvantaged groups, leading to duplication in issuing health insurance cards, and waste of state budget resources.
- Monitoring and evaluation of results and impact of financial support policies for the poor and other disadvantaged groups is not carried out in a systematic way. There is a shortage of data and information relating to the implementation of financial protection policies for these groups.

## 2.3. Recommendations

In order to resolve the above priority problems, the report proposes the following solutions:

### Short-term

- Amend the Law on Health Insurance in the direction of further expanding financial protection for the elderly below age 80, prioritizing rural residents; removing co-payments for the poor and ethnic minorities in disadvantaged areas; reducing co-

payments to 5 per cent and imposing stop loss provisions on coverage for the near poor, starting with people living in disadvantaged regions.

- Enhance the role and responsibility of the Provincial People's Committees to effectively implement health insurance policies for the poor and the disadvantaged; effectively implement support to cover direct payments for non-medical treatment according to the Prime Ministerial Decision No. 14/2012/QĐ-TTg; mobilize resources for the provincial health care funds for the poor.
- Reform administrative procedures, speed up progress and effectively utilize financial resources from state budget projects and international health assistance projects for disadvantaged areas, placing priority on communes and towns in the poorest districts according to Resolution 30a.
- Strongly promote communication about the rights and obligations of people enrolling in health insurance; strengthen the legal basis for health insurance; increase monitoring of compliance with state regulations on health insurance; and deal strictly with any violations.
- Carry out research assessing economic impacts of health care policies on these groups in order to provide timely information and evidence for developing and implementing policies on equitable access to affordable health care services.

#### **Long-term**

- Issue policies for full state subsidies for health insurance with payment regulations appropriate for the poor and other disadvantaged groups.

### **3. Development of universal health insurance**

Risk pooling and prepayment are critical for providing financial protection [223]. Health financing based on state budget revenues and social health insurance are two operational mechanisms for implementing the principles of risk pooling and prepayment for health care.

As recommended by WHO, to achieve UHC in Asia-Pacific region countries during 2011–2015, it is recommended that health financing measures include prepayment methods and risk pooling to cover over 90 per cent of the population; and cover nearly 100 per cent of vulnerable groups through social subsidies and other social safety net programs [152].

In the early 1990s, Vietnam undertook health system reforms, including health financing reform, transforming from fully state-subsidized to mixed health financing mechanisms with multiple revenue sources, including a social health insurance system implemented since 1992.

This Section will discuss implementation of financial protection by prepayment through health insurance, assess achievements and progress as well as difficulties and shortcomings with a view to proposing corrective measures to refine the financial protection mechanism through health insurance in the course of implementation of UHC.

#### **3.1. Situation assessment**

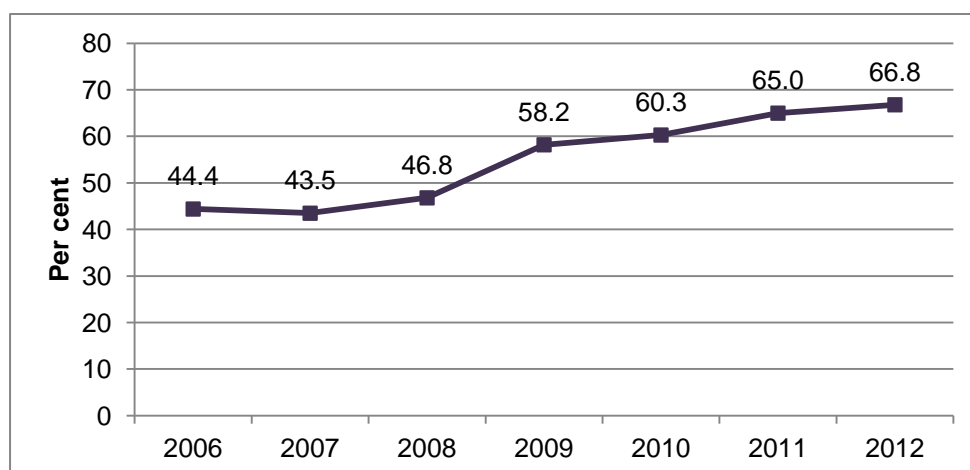
##### **Achievements and progress**

*Over the past 20 years, Vietnam has issued and effectively implemented many health insurance related policies. In 2008, the Law on Health Insurance was promulgated, which*

laid out the roadmap toward universal coverage by 2014. Over 27 million people, including the poor, ethnic minorities living in disadvantaged areas, children under age six and many other beneficiaries of social assistance policies are now covered by health insurance fully subsidized by public funds. The near poor and school students are also eligible for high subsidies to pay the insurance premium (for near poor household, subsidy up to 2012 was 50 per cent of the premium and from fiscal year 2012 onward the minimum subsidy is 70 per cent).

In 2011, 57.08 million people were covered by social health insurance, accounting for 65.0 per cent of the population. In 2012, it was estimated that about 59.31 million people enrolled in health insurance [18] (Figure 20). Insurance coverage in some mountainous provinces, with a high share of the population living in poverty or belonging to ethnic minorities, reached over 75 per cent of the population. Financing through the health insurance fund has become one of the most important sources of funding for health care services. In 2012, the health insurance fund disbursed about 33.4 trillion VND (1.7 billion USD) to reimburse medical service costs.

**Figure 20: Health insurance coverage in Vietnam, 2005–2012**



Sources: 2006–2011 – Ministry of Health, Report on feasibility study on implementing universal health insurance coverage, Hanoi, February 2011 [224]; 2012 – Health Insurance Department, Ministry of Health.

The scope of health services covered by health insurance is relatively comprehensive, from medical examination and treatment to rehabilitation services at all levels of the medical care system. While financing of medical services comes through both health insurance and the state budget, financing of preventive medicine and health promotion services is almost entirely funded by the state budget. In 2011, utilization rate of health insurance card was 2.02 visits per insured person; annually there were 15.6 inpatient treatment episodes for every 100 people. The health care delivery network continues to be strengthened and upgraded, and the list of drugs and technical services covered by health insurance continues to be expanded, to better meet the people's need for health care.

Health insurance policy has received special interest from the State, the health sector and the entire society. The state budget has prioritized its support to extend health insurance coverage to the informal sector. Many new policies are being implemented to strengthen capacity for health service delivery and quality of care. The Ministry of Health has approved the Project to implement the roadmap towards universal health insurance coverage, striving by 2015 to ensure at least 70 per cent of the population is covered by insurance. The Ministry of Health has determined that implementing universal health insurance is a key task of the Plan for the protection, care and promotion of the people's health for the period 2011–2015.

### Difficulties and shortcomings

Although health insurance coverage has rapidly increased in recent years due to full subsidies of the premium for several tens of millions of people with low income, and beneficiaries of merit-based and social security schemes, it is nevertheless facing major challenges. Some 30 million people are still not covered by health insurance. Financial protection among the insured is only partial. The health insurance fund is not yet used effectively and service quality is below expectations.

#### With respect to population coverage

*Coverage rates in the informal sector remain low.* Compliance with premium contributions among enterprises is poor, over 50 per cent of enterprises do not yet participate in health insurance. In 2011, the number of wage workers participating in health insurance accounted for only 7.9 per cent of all the insured [124]. Low compliance in enterprises, particularly private enterprises is due to the following issues:

*Current regulatory documents do not stipulate that participation in health insurance is compulsory.* The concept of *social health insurance* is not yet mentioned in the Law on Health Insurance. Social health insurance in Vietnam is not yet considered as one of two public financing mechanisms for health (the other mechanism being health financing based on tax revenues), that share the common feature of compulsory mobilization of financial contributions from individuals with the level of contribution depending on ability to contribute and the level of benefit not depending on the amount of funds contributed, but rather on health status.

*Lack of measures to ensure compliance.* Because the Law on Health Insurance does not yet stipulate that health insurance is social insurance, in which social health insurance contributions are considered as a type of tax earmarked for health care, the Law does not stipulate effective measures to ensure compliance. Although Decree No. 92/2011/ND-CP on sanctions for administrative violations in health insurance does stipulate sanctions for violations related to health insurance contributions, there are not yet effective methods to enforce those regulations. Violations of evading health insurance contributions are not considered the same level of seriousness as tax evasion in the Criminal code. The VSS has not been assigned the function of professional inspection of health insurance contributions [225] yet the general department of taxation has been assigned the responsibility of professional inspections on taxes.

*Health insurance coverage in the informal sector achieves high rates in groups that receive 100 per cent subsidies, but low rates among those given less than 100 per cent subsidy.*

*The enrolment rate among near-poor households has remained low,* even though the initial 50 per cent subsidy from the state budget for their contributions was increased to 70 per cent starting in 2012. In 2012, three-quarters of the 5.8 million near-poor people have still not enrolled in social health insurance because of several reasons including: low awareness of the rights and responsibilities of health insurance, high contribution amounts (still 30 per cent of the premium), high co-payment rate (20 per cent), etc. The basic principle of social health insurance, “to contribute a predetermined amount to protect oneself against large unpredictable medical expenses” [223], has seemingly not been implemented in practice.

*The proportion of people enrolled in health insurance among the group with average and higher income remains very low.* There are only few people in agricultural, fishing, salt



industry or forestry households with average or higher income who participate in voluntary health insurance (mostly people who have pre-existing need for medical care).

The main reasons for the low health insurance participation among the near poor and informal sector workers with average and higher incomes is that: (i) quality of medical services at the grassroots level does not yet meet need and out-of-pocket payments are still required at higher levels; (ii) *the level of support from the state budget for health insurance contributions of people in the informal sector is low yet incomes of near poor households and rural households above the near-poor threshold are still low*. The amount of state budget support for health insurance contributions among the near poor and average income people is inadequate to support their participation in health insurance. Experience from developed countries indicates that no country has successfully implemented coverage of the informal sector based on a contributory health insurance scheme. Three countries with middle income in Asia (Malaysia, Thailand and China) that have achieved UHC for the informal sector have had to rely entirely or largely on the state budget.

*Health insurance coverage is still organized on an individual basis and not according to families*. The organization of health insurance coverage in Vietnam currently relies largely on individual coverage for each member of the family to participate in health insurance according to different entitlement groups, because different organizations are responsible for implementation. Coverage based on individual enrollment in Vietnam has led to reduced risk pooling within the family, increased complexity of managing different insurance groups, which may lead to overlooking some individuals or duplicate coverage for others (since individuals may be entitled to health insurance through multiple support policies). At the same time, the state budget is being used to fully subsidize contributions for some groups that have the ability to make their own contributions (which conflicts with the social health insurance principle of contributing according to ability to pay, and ensuring payments from state budget for those who cannot). Global experience also shows that countries that have achieved universal health insurance coverage have organized participation in health insurance by households not individuals.

In addition, state management of commercial insurance operations remains limited. Recently, the revised Law on Commercial Insurance has been enacted but it does not stipulate the role and position of commercial health insurance in Vietnam as a type of *complementary* or *supplementary* insurance, or as a *substitute* for social health insurance. Therefore, there is a vibrant growth of commercial health insurance in Vietnam, covering tens of millions people mainly targeted at healthy or high-income enrollees. In 2009, nearly 50 per cent of students enrolled in commercial health insurance programs. Revenue from commercial health insurance in 2009 was over 11 trillion VND [226]. Some private hospitals also introduce health insurance packages under the form of hospital membership cards. So far, the “cream skimming” of commercial health insurance has not yet been evaluated nor have prevention measures been set up.

### **Sustainability and cost-effectiveness in use of the health insurance fund**

Effective use of the health insurance fund determines the sustainability of the fund. However, the Law on Health Insurance and government decrees do not provide guidance for *principles and procedures to ensure responsiveness to safety, efficiency, quality and affordability criteria* in selecting medicines or health services as intended in the spirit of the United Nations General Assembly Resolution [70]. Health technology assessment is a necessary research area for selecting medicines and technical services, but has not yet been implemented in Vietnam. Currently selection of medicines and medical consumables is mainly subject to proposals of hospitals. Members of the hospital’s committee for preparation



of the drug and consumables lists propose selection principles and simultaneously include the medicines and medical supplies they want in the list. Indeed, there is no separation between principle developers and medicines list preparers, and cost-effectiveness evidence is not used during the review and decision on drug and consumables selection.

Similarly, *the review and approval process for new medical technologies in Vietnam does not usually take into account cost-effectiveness considerations*. The hospital approval committees mainly consider and assess from the perspective of technical capacity of the facility when approving the application of a diagnostic or treatment technique in a hospital.. Technologies are approved for use when they are assessed as safe and the facility has adequate conditions in terms of human resources and technical equipment to provide them. Cost-effectiveness is not taken into account. Usually, when a technical procedure falls within the benefit scope of enrollees (examination, treatment and rehabilitation), is approved for application in a health facility, and its service price is endorsed by competent authority, then such services will be reimbursed by health insurance. This means that there are some cost ineffective technical services that are still included in the list covered by the health insurance fund.

In order to control the risk of health insurance fraud, moral hazard and adverse selection from voluntary insurance holders, and at the same time because of the inadequacy of mechanisms to ensure cost-effectiveness in treatments, almost all high tech services, including diagnosis and treatment, have become commonplace with prices that are not extremely high (several million VND per implementation), and are proposed to be included in the list of expensive high tech services in order to limit their use and minimize payments for them. Such ad hoc solutions continue to create a sense that the health insurance policy does not encourage the development of the field of medicine (one of the three goals of Vietnam's health system: equity, efficiency and development). In this way, limitations in measures to ensure cost-effectiveness lead to limitations on development of new technologies and at the same time limitations on financial protection (small costs are paid by insurance but higher costs exceed the ceiling covered by insurance so the people have to pay out-of-pocket).

### **Financial protection for the insured**

Although enrollees are covered by health insurance, some of them still have to pay out-of-pocket beyond their ability to pay, putting them at risk of falling into poverty. The following factors contribute to increasing out-of-pocket payment for enrollees using health care services:

*People are often billed extra for medicines, medical supplies and technical services not included on the insurance list.* According to doctor's prescriptions, health insurance patients sometimes have to pay for drugs, consumables and technical services that are not reimbursed by health insurance. One reason is that the health insurance fund at the hospital may be insufficient (the health insurance fund is determined based on total contributions of people participating in health insurance who registered at the facility as their primary place for seeking care), so in order to avoid overspending the insurance fund at the hospital, the drug and therapy committee of the hospital excludes certain necessary, but expensive drugs from the hospital's drug list for health insurance reimbursement. Another reason is that some drugs that are not on the major drug list because they are unnecessary, are nevertheless promoted for use through marketing programs or informal commissions to prescribing practitioners.

*Prices of drugs and medical supplies* are not well managed. Some studies on drug price show that drug prices in Vietnam are higher than international reference prices [147]. (See details in Chapter III, Section 4).

*Current irrational drug use* induces waste in treatment and increased expenditure from the health insurance fund, increasing co-payment costs (see details in Chapter III, Section 4).

*Out-of-pocket payment burden at higher facilities.* Due to failure of the PHC system to meet health care needs for common illnesses, especially non-communicable diseases, people have to pay higher amounts out-of-pocket when using services provided by higher level facilities (accommodation costs, transport costs and co-payment costs are higher at tertiary facilities).

*Regulation on co-payment without stop loss provisions is an insurmountable obstacle for low-income people.* The current regulation on co-payment set at 5 to 20 per cent without stop loss provisions may lead to the co-payment portion reaching levels beyond the ability to pay, leading to impoverishment. The out-of-pocket payment share is rising annually; in 2010 it was 12.8 USD per household per year. In 2010, the proportion of households from the poorest quintile (a majority of households in this group have coverage of health insurance for the poor for their members) who faced catastrophic spending reached 4.7 per cent, and the proportion impoverished due to catastrophic health spending reached 5.4 per cent (See details in Chapter IV, Section 1).

*Increased health spending is attributed to incentives inherent in additional income paid to staff from hospital surplus and profits from private investments in public hospitals.* Implementation of the hospital autonomy policy in Vietnam permits hospital staff to gain additional income from surplus generated when hospital revenues from user fees and health insurance are higher than costs of providing services. In addition, the use of medical equipment procured from private for-profit investments in public hospitals within the social mobilization policy also leads to doctors overproviding some health care services. The current predominant fee-for-service payment mechanism creates favorable conditions for these policies to escalate health care costs as mentioned above.

*The average contribution amount* is much lower than average per capita health spending, leading to a situation where people covered by health insurance still have to pay for medical services out-of-pocket. The state budget pays health insurance contributions for up to 47 per cent of all health insurance participants at a rate of 4.5 per cent of minimum salary. This has led to the situation in which the health insurance fund is largely made up of low income members with little ability to share the burden of health care costs. According to WHO recommendations, in order to ensure universal coverage, and financial protection, the public financing sources for health need to reach 4–5 per cent of GDP [152]. In 2011, the average health insurance contribution per capita reached 514 000 VND (27 USD, 2.2 per cent of per capita GDP), while estimates of average per capita health spending in 2011 and 2012 reached 83 USD and 95 USD respectively [227], including average per capita curative care costs of 55 USD. The average per capita curative care spending paid from the health insurance fund reached only 24 USD [124], less than 50 per cent of the average per capita curative care expenditures. The consequence of the gap between health insurance contributions lower than health expenditures is that either the people participating in health insurance must pay more when using medical services or the quality of services must decline.

*Co-payment without stop loss provisions* within the context of average premium contributions being lower than average per capita medical care costs, selection of medicines

and medical services made based on subjective proposals of hospitals without considering actual evidence of cost-effectiveness, the fee-for-service payment method applied in most hospitals and incentives motivating overprovision of services to gain more income for health workers and profits for investors ... are all factors that contribute to increased out-of-pocket payment among the insured, limiting the financial protection provided by Vietnam's social health insurance policy.

### **3.2. Priority issues**

Priority issues selected to be addressed in the short- and medium-term focus on expansion of insurance coverage for salaried workers in private enterprises and workers in the self-employment sector, but starting with the near poor; ensuring sustainability and risk pooling capacity of health insurance; and strengthening financial protection for the insured.

#### **3.2.1. Difficulties and challenges in expanding population coverage**

- Low compliance to premium contribution of private enterprises.
- Low enrollment rate among the near poor.
- Very low coverage of insurance in the informal sector among people with average income and higher.

#### **3.2.2. Failure to secure sustainability and cost-effectiveness in using the health insurance fund**

- Failure to fully apply the principle of selecting medicines and medical services for insurance coverage based on evidence of cost-effectiveness and ability of the people to contribute financially.
- Difficulties in implementing health technology assessment to select safe and efficient health services suitable with the population ability to contribute.
- Difficulties in selecting safe, efficient medicines suitable with the people's ability to contribute, and in preparing the list of insured medicines based on the inclusive list of essential medicines as recommended by the WHO.
- Ineffective management of drug prices. (See Chapter III, Section 4).

#### **3.2.3. Financial protection of social health insurance remains limited**

- Rising out-of-pocket payments due to: implementation of co-payment without stop loss provisions; imbalance between payment rate and average health expenditure per capita and due to bypassing to seek care at higher levels.
- Rising out-of-pocket payment due to use of expensive services with low cost-effectiveness. "Strategic procurement" is not yet seen in regulations or guidance for implementation of health insurance.
- Rising out-of-pocket payments due to widespread use of the fee-for-service payment method within the context of applying the autonomy policy as currently designed.
- The health insurance fund is unsustainable, has little ability to pool risks because total contributions to health insurance from the formal sector are low, a majority of the health insurance fund comes from the state budget subsidizing health insurance coverage with low premiums.

### 3.3. Recommendations

#### 3.3.1. Solutions to expand health insurance coverage

- *Expansion of coverage in the formal sector in private enterprises.* To secure compliance with insurance in the formal sector, VSS should be empowered with inspection authority to carry out inspection of premium payments and oversight of compliance by employers. Other specific inspection functions under the health insurance area will continue to be performed by state management agencies as currently regulated in the Law on Inspection. In line with the empowerment of VSS with inspection authority, it is recommended to set measures on sanctions, stricter coercive measures since health insurance premiums should be considered as a special tax earmarked for health care, and tax evasion in premium contribution should be treated similarly to other types of tax evasion.
- *Expansion of coverage for the near poor.* To secure coverage of the near poor, necessary measures are to raise the subsidy for premiums from 70 to 100 per cent. Empirical experience with premium subsidies of 70–80 per cent in some localities have shown that such premium subsidies are inadequate to help the near poor overcome financial difficulties to pay the balance of the premium.
- *Insurance coverage for workers in the informal sector with average income and higher.* To overcome the current low coverage in this sector, especially among rural households, it is recommended to review the possibility of raising premium subsidies from the state budget. Experiences from countries in the region indicate that only by collecting general tax revenue to pay for health care costs of the informal sector, can the government provide full coverage in this sector. Malaysia and Thailand subsidize 100 per cent of health care costs for the informal sector; China subsidizes 80 per cent of the premium contribution for 950 million farmers. Indeed, Vietnam's current premium subsidy of 30 per cent for farmers with average income and 0 per cent for farmers with income higher than average level should be reconsidered so that optimal subsidies for premiums can be set for these groups.

#### 3.3.2. Secure sustainability and cost-effectiveness in use of the health insurance fund

- Strengthen the principles of selecting medicines and medical services for health insurance coverage based on evidence of cost-effectiveness and appropriate with the people's ability to contribute. In order to shift to evidence-based approaches applying cost-effectiveness criteria, it is advised to immediately issue regulations on the principles and procedures in preparing and updating lists of drugs and medical services covered by the health insurance fund or by the state budget but subject to cost-effectiveness evidence and appropriate with Vietnam's financial capacity. It is recommended to ensure that the principles and procedures for preparing and updating the insured drug formulary be independent and separate from the selection of medicines and medical services. Thus, it will help avoid simultaneous adjustment of the principles and inclusion of medicines and services in the list, which is prone to abuse.
- Carry out health technology assessment to select safe, efficient health services appropriate with the people's ability to contribute. As proposed in the previous JAHR reports, it is recommended to seek international experience and embark on health technology assessment, for the immediate future, focusing on assessing new high cost technologies, or low cost but widely used technologies to inform the review process

of acceptance or removal of those technologies included in the list reimbursed by health insurance.

- Select safe, effective medicines appropriate with the people's ability to make financial contributions. Develop the list of medicines covered by insurance based on the list of essential medicines and recommendations by WHO. It is necessary to ensure that the health insurance formulary in medical facilities includes all medicines in the essential medicines list. To change the perception and viewpoint of the role of essential medicines in the Vietnamese health care system, it is recommended to carry out a communication program on National Drug Policy targeted at three audience groups: health system managers, pharmaceutical prescribers and pharmaceutical users.
- *Strengthen efficiency in procurement.* The Ministry of Health should review its policy on procurement of medicines and drug price management to overcome widespread waste, and drug prices in Vietnam higher than international prices. Proposed measures can be found in Chapter III, Section 4 of this report.
- Consider adjusting regulations for health insurance to include a deductible beyond which health insurance starts to reimburse costs.

### 3.3.3. Improve the function of financial protection of social health insurance

To improve the degree of financial protection, apart from measures to secure sustainability and efficiency in using the health insurance fund through development of drug formularies and medical service lists based on evidence of cost-effectiveness, strengthening efficiency in management of drug procurement and measures to improve access to PHC services, especially access to non-communicable diseases care as mentioned above, the following measures should be prioritize for implementation:

- Revise regulations on co-payments, implement a stop loss provision to limit the maximum co-payments from patients, overcome the situation where the co-payment is beyond people's capacity to pay. The Law on Health Insurance should be revised and adjusted to include annual stop loss provisions to ensure that co-payments – subject to average income of each enrollee group – shall not exceed their ability to pay.
- *Adjust the average health insurance premium to equal average health care costs per capita.* If the average premium remains lower than average health care costs (when the medicines and services are selected based on cost-effectiveness evidence, and non-cost-effective medicines and services are removed from insurance coverage) the people will continue to either bear out-of-pocket payment to cover the insurance fund deficit, or be refused necessary health services.
- Reform payment methods to incrementally remove fee-for-service payments (See details in Chapter IV, Section 6 on provider payment methods in this report).
- *Revise and amend financial autonomy and social mobilization policies,* to remove the incentives for overprovision inherent in for-profit investments and income generation from hospital surplus for health workers (See details in Chapter III on service provision in this report).

## 4. Mobilization of financial resources for UHC

Ensuring adequate financial resources for UHC implementation constitutes one of the focal issues of health financing emphasized by the WHO in the World Health Report 2010. In addition to the amount of financial resources that need to be mobilized for health, the



methods for mobilizing such financial resources are also of importance. The Resolution of the United Nations on UHC calls for member countries to ensure a health financing system that includes a method for prepayment of financial contributions for health care and services and a mechanism to pool risks among the population to protect citizens from financial risks due to health spending [70]. This Resolution also recommends that member nations minimize direct payments at the point of delivery. WHO has recommended strategic health financing goals applicable to Asia-Pacific countries for the period 2011–2015 in the roadmap to UHC, including: (i) household out-of-pocket payment less than 30–40 per cent of total health expenditure; (ii) total public expenditure for health accounting for at least 4–5 per cent of GDP; (iii) coverage of more than 90 per cent of the total population by some pre-payment mechanism (tax-based budget or social health insurance); (iv) nearly 100 per cent of vulnerable groups receiving support and protection through social protection policies [152].

The following section assesses the situation and feasibility of mobilizing financial resources for universal healthcare in Vietnam with a focus on analysis of potential supplementary resources from the state budget.

#### **4.1. Situation assessment**

According to WHO, the amount a country spends on health depends on the package of services covered according to the needs of the population and conditions in each country. Per capita health expenditures in Vietnam in 2011 reached 95 USD [11], about the same as Indonesia and the Philippines (95 USD), but lower than Thailand (202 USD) [151], and higher than the per capita amount of 60 USD by the year 2015 recommended by WHO for low income countries to be able to implement the MDGs and ensure access to essential medical services, including interventions for non-communicable disease [227]. Nevertheless, household direct out-of-pocket spending is still high (exceeding 50 per cent of total health expenditures). According to WHO, it is difficult to achieve UHC if household out-of-pocket spending for health accounts for more than 30 per cent of the total health expenditure of society [152].

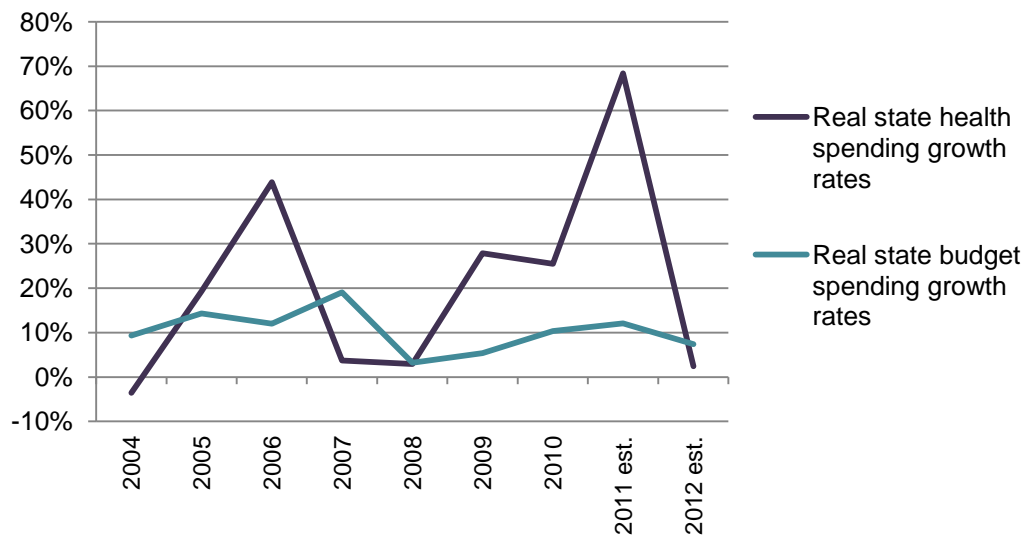
##### **4.1.1. Government budget share for health**

National health accounts in Vietnam indicate that state budget spending on health accounted for 26 per cent of total health spending in 2010 [11]. The share of the state budget spent on health has risen 34.2 per cent, higher than the growth in general government spending of 20 per cent over the period 2008–2013 [10]. In recent years, in addition to allocations to cover recurrent expenditures of the health sector, state budget allocations to health have increased considerably in order to implement full or partial subsidies to health insurance premiums of different benefit groups according to the Law on Health Insurance, including the poor, the near poor, ethnic minority people, children under age six, social assistance beneficiaries, students and pupils. In addition, state budget investment spending has also increased in the health sector, through government bond funding to implement a range of projects investing and upgrading the local health network pursuant to Prime Ministerial Decisions No. 225, 47 and 930.

However, the annual growth rate in the state budget allocated for health in the last three years has sharply declined due to general macroeconomic hardship and the fiscal restraint policy in accordance with Government Resolution No. 11/NQ-CP (2011) [16]. In 2012, the annual growth rate in state budget for health was lower than in 2011 and continues its decreasing trend in the budget estimate for 2013 (Figure 21).



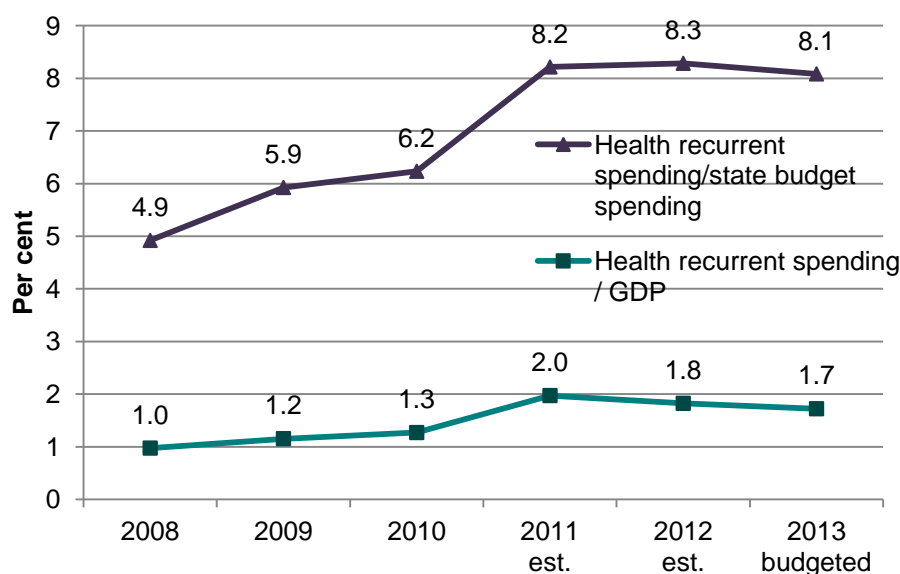
**Figure 21: Real growth rates in state health recurrent spending and overall state recurrent spending, 2004–2012**



Source: Ministry of Finance state budget statistics. [10]

Note: Deflated to constant 1994 prices using GDP deflators from GSO Website. <http://www.gso.gov.vn/default.aspx?tabid=622&ItemID=13501>

The share of state recurrent expenditures allocated for health increased continuously between 2008 and 2012, reaching 8.3 per cent. Nevertheless, 2013 estimates indicate this rate has slightly decreased to 8.1 per cent. The state budget share for health as a portion of GDP increased between 2008 and 2011, peaking at 1.97 per cent, but has seen a decline in 2012 and 2013 (Figure 22). This indicator reflects the extent of priority given to the health sector in general budgeting. Several countries, including under-developed ones in Africa, have set targets of increasing budget for health to 15 per cent of the total state budget expenditure in efforts to prioritize health [72].

**Figure 22: State budget recurrent expenditure on health as a share of overall state budget expenditure and as a share of GDP, 2008–2013**

Source: Ministry of Finance state budget statistics [10]

Vietnam's UHC target is being implemented through social health insurance with subsidies from the state budget. The state budget contributions to subsidize participation of certain population groups accounts for 45 per cent of total social insurance fund revenues. In 2012, the World Bank conducted an analysis of resource need and fiscal space for health insurance coverage. This study calculated the amount of funds necessary for coverage of 70 per cent of the population by 2015 (according to the roadmap laid out by the Government) based on 6 different scenarios. According to this study, with the goal of developing health insurance to cover 70 per cent of the population by 2015, the state budget would have to increase by 0.6–0.7 per cent of GDP (according to the Government's roadmap for expanding coverage and current contribution amounts) and 0.7–1.6 per cent of GDP (if coverage is both broadened and deepened, i.e. increasing ability to access services and reduce out-of-pocket spending through methods such as increasing prices of medical services, increasing contributions to health insurance, increasing investments in the grassroots health system,...) [19].

Fiscal space analysis for health reflects that:

- *Macroeconomic conditions:* the macroeconomic outlook of Vietnam is generally optimistic. Although the economy is growing, it only achieved a growth rate of 5.03 per cent in 2012, but this is forecast to increase to 6.2 per cent by 2014. Based on current forecasts of economic growth and the current income elasticity of health spending, it is estimated that Vietnam could have an additional amount of resources equivalent to 0.4 per cent of GDP by 2015 if the following conditions are met: (i) macroeconomic growth returns to levels before the global economic downturn and (ii) state budget share spent on health is maintained and ensured. Thus, it is not possible to meet the need for financial resources to implement health insurance coverage of 70 per cent of the population by 2015 only through increasing state budget spending. Many opinions concur that in the current economic context, it would be difficult to expand the level of state support for people to participate in health insurance. In reality, society can only increase spending on health in line with the growth of the economy. When the need for health spending increases higher than

economic growth, it is necessary to consider the ability to transfer financial resources from other sectors to the health sector. At the same time it is necessary to implement strategies for mobilizing additional financial resources and strengthening effectiveness in use of existing resources.

- *Priority in state budget allocations for health:* According to the analysis, to achieve the health insurance coverage according to the roadmap laid out by the Government, the government budget share for health should increase to at least 7.5 per cent and at most 13.1 per cent. Fact and figures show that although the current government budget share for health as a portion of total government expenditure is more than 8 per cent, the rate of increase has fallen and even declined (lower in 2013 than in 2012), which implies that the extent of priority given in allocating state budget for health is not as high as expected.
- Increasing public expenditures on health is an important strategy recommended by WHO to its member countries in order to implement the goal of UHC [152]. There is evidence indicating clear benefits of increasing public spending on health in terms of health outcomes. According to the World Bank, a ten per cent increase in public spending on health as a share of GDP can reduce the MMR by 7 per cent, under-five mortality by 0.69 per cent and child underweight malnutrition by 4.14 per cent [228].

#### 4.1.2. Revenue from health insurance

In 2010, with coverage of 60.3 per cent of the population, the social health insurance scheme only contributed approximately 18 per cent of total health expenditure of the entire society [11]. This low contribution share is attributed to the fact that preventive medicine services are paid by direct state budget subsidies and not by health insurance, expensive private sector services and self-medication are also not covered by health insurance, and the Law on Health Insurance stipulates co-payments of 20 per cent for many of the insured. Most of the health insurance fund is spent on reimbursing curative care services, while administrative costs have been relatively stable at around 3 per cent of total health insurance expenditures over the past 3 years [21], which was relatively low compared with the average of 4.7 per cent in OECD countries. However, this estimate may not be accurate since administrative expenditures related to health insurance are typically included in the general administrative expenditures of VSS.

Increasing funding through health insurance schemes for healthcare in general depends on three factors: (i) effectiveness of health insurance premium collection; (ii) potential for coverage expansion, and (iii) increased premiums. The VSS is encountering difficulties in collecting premium payments, especially from enterprises. Enterprise non-compliance with compulsory contributions for social and health insurance is serious and complicated. According to VSS data, by November 2012, the amount of social insurance contribution arrears reached 8.7 trillion VND, of which 2.1 trillion VND was related to health insurance arrears. The number of enterprises in arrears for social and health insurance contributions is growing; the VSS has recently published a list of nearly 400 enterprises with arrears in social and health insurance contributions. VSS attributes this to many factors, including the stipulation of low interest rates imposed on delayed social insurance contributions compared with the bank interest rates, resulting in intentional delay of social insurance contributions by many enterprises, despite penalties, to “borrow” from the social insurance fund; weak sanctions for violations in the social security sector such as low fines, complicated sanctions procedures, absence of a regulation on criminal sanctions related to the retention of the employee’s social security share without paying it to VSS. Lack of social security inspection and enforcement functions for the VSS agency means that when

violations are detected, they are limited to only reminding the enterprise and request compliance with the regulation, and then reporting it to the provincial or district People's Committee.

Regarding the potential to expand coverage, analysis of historical data gathered during 2006–2012 indicates an increasing trend in health insurance coverage over time. A jump in coverage occurred especially in 2009 when the Law on Health Insurance came into effect for 20 out of 25 groups enrolling in social health insurance. However, it should be noted that the rate of increase in coverage over recent years has slowed down (Figure 20). This is a common trend found in health insurance development in different countries, especially those with a large informal employment sector like Vietnam. Analysis of coverage by target group shows the lowest coverage rates among the near poor and voluntary groups (21.4 per cent and 26.1 per cent respectively). People who participate in social health insurance through the voluntary scheme are primarily farmers [21].

The current health insurance premium is set at 4.5 per cent of salary, pension or minimum wage. Compared to the maximum level of 6 per cent allowed in the Law on Health Insurance, the current premium still has space for further increase. Nevertheless, both international advisors and feedback during discussions of revisions to the Health Insurance Law consider it is unrealistic to consider such an increase at this time. Regarding fund balance, according to VSS, the health insurance fund has ensured balance between revenues and outlays in all three years of implementation of the Law on Health Insurance, with the accumulated fund in 2012 reaching 7.722 trillion VND. Moreover, in the context of the current macroeconomic challenges in production and trade, it would be difficult to get a consensus from various stakeholders to recommend increasing health insurance contribution. Such a recommendation, if made, requires careful projections and impact analysis.

#### **4.1.3. External assistance**

External assistance for health does not account for a large portion of total health expenditure (approximately 2.3 per cent in 2009 [11]). Vietnam has become a lower middle-income country but external assistance for health remains high [14]. In 2012, 52 ODA projects were being managed by the Ministry of Health with the total commitments of approximately 1.5 billion USD. However, Vietnam is facing a decreasing trend in concessionary aid sources through gradual replacement by less concessionary capital. Effectiveness of external assistance has been limited due to weaknesses in coordination, project implementation capacity, administrative procedures, and inadequate monitoring and evaluation... The disbursement rate of ODA projects has improved in recent years, reaching 65 per cent in 2011, but estimated to reach only 51 per cent in 2012 [14, 15].

In addition to ODA projects, as reported by the Ministry of Health, 106 health projects are financially supported by NGOs with total commitments of 256 million USD. Despite accounting for only a modest portion of total health expenditures, external assistance, including technical and financial support, is still significant for addressing problems related to expanding coverage and depth of the health insurance schemes. Models of support for non-medical costs of seeking care for the insured poor and support for the near poor to enroll in health insurance, after being piloted in some ODA projects, continue to be implemented in health support projects of development partners such as the World Bank and European Commission. Technical support aiding the Ministry of Health and VSS to reform provider payment methods for healthcare is also receiving the attention of various development partners, such as the World Bank and ADB.

#### 4.1.4. Innovative financing for health

In addition to state budget and social health insurance funding for health, in order to increase financial resources for UHC, it is advisable to promote innovations to increase financial resources for health activities. Such initiatives have, so far, been put in place mainly in high-income countries. Additional funding for healthcare could be obtained through various innovative methods such as increased aviation tax, increased foreign currency exchange fee, or increased tobacco taxes... Through these methods, 10 billion USD has been added to resources for global health [72]. Some countries, such as Taiwan, the Philippines and South Korea, apply increased special excise taxes on selected goods and the increased revenues from this source are used for expanding health insurance schemes to cover selected target groups.

In Vietnam, since 2007, revenue from the lottery has not been included in the local income – expenditure balance but managed through the national budget, used exclusively for investing in important social welfare infrastructure with a focus on investment in education and health [229]. In 2011, the total amount mobilized for health from the lottery in all provinces nationwide was 2.154 trillion VND, accounting for 7.1 per cent of the total recurrent government budget for health.

Regarding the potential for increasing tobacco excise taxes to fund the health sector, the current level of 65 per cent could still be further increased within the average range recommended by WHO (65–80 per cent). Furthermore, according to the cost-effectiveness analysis of tobacco control interventions, the interventions of increasing the excise tax rates from 55 per cent to 65 per cent, 75 per cent and 85 per cent seem to be very effective. Such a policy will contribute to providing additional funds for health and effective reduction in smoking prevalence at the same time. According to the Law on Tobacco Control adopted by the National Assembly in 2012, from 1 January 2013, it is compulsory that tobacco manufacturers and importers make financial contributions to the Tobacco Control Fund at the level calculated based on the percentage of the price for calculating excise tax according to the following roadmap: 1.0 per cent from 1 May 2013; 1.5 per cent from 1 May 2016; 2.0 per cent from 1 May 2019 [230]. In addition, the special excise tax on alcohol or means of transport (which cause pollution) will also be potential financial resources for supporting the expansion of health insurance coverage.

## 4.2. Priority issues

The situation analysis of financial mobilization for UHC reflects certain outstanding problems as follows:

- Decreasing trend in the growth rate of state budget share allocated to health. The state budget expenditure share spent on health is less than 10 per cent and is experiencing a decreasing trend. The possibility of increasing the government budget share for health in the current context is affected by macroeconomic difficulties.
- Modest share of health financing resources from health insurance (18 per cent) compared to health insurance population coverage (60.3 per cent). This is attributed to several causes including: health insurance does not reimburse costs of preventive medicine, expensive private services or self-medication, the Law on Health Insurance imposes co-payments on many insured groups; collection of health insurance contributions is limited for some groups; expansion of health insurance coverage for the remaining groups faces severe difficulties.

- Only a small share of health expenditures coming from external assistance, which is likely to experience gradual reductions in the coming years; limited effectiveness of external assistance as measured by the disbursement rate that reached only 51 per cent in 2012.
- Innovative health financing still limited and receiving little attention from policymakers.

### **4.3. Recommendations**

In order to gradually address the above-mentioned priorities, the following solutions have been recommended:

#### **4.3.1. Increase state budget share for health**

- The foremost priority should be to sustain growth in state budget for health at a higher rate than growth of the general state budget.
- In the medium term, it is important to continue increasing government budget expenditure on health to reach the minimum level of 10 per cent of the total state budget expenditure.
- The state budget should be allocated to ensure priorities of the health sector towards UHC through various projects including the project on implementing the roadmap to universal health insurance, strengthening grassroots health care, and curative care quality improvement, etc.
- Application of the medium-term expenditure framework should be promoted in planning the allocation of financial resources to health.

#### **4.3.2. Increase financial mobilization through social health insurance**

- Refine legislation and policy documents to strengthen verification and supervision to strengthen compliance with compulsory contributions to social health insurance: strengthen inspections, strictly impose sanctions on units not complying with obligations to contribute to health insurance for employees, stipulate that VSS should be assigned the function of verification and authority to impose sanctions related to implementing regulations on contributions to social health insurance, stipulate a joint-sectoral coordination mechanism in this area.
- Expand coverage of health insurance in the population, concentrating on target groups benefiting from partial subsidies from the state budget where coverage continues to be low, including the near poor and medium-income farmers. (Specific solutions have been recommended in Chapter IV, Section 3 on health insurance).

#### **4.3.3. Applying initiatives to mobilize additional funds for health**

- Considering the application of the policy on excise taxes imposed on goods hazardous to health such as tobacco and alcohol (i.e. sin taxes) to increase financial resources for healthcare.

### **5. Increase efficiency of available resources**

In the current context of economic problems, the financial strategy should particularly focus on effective use of the available financial resources to bring about increased health benefits for the people. WHO recommends to its member nations, regardless of affluence or poverty, that this strategy should be prioritized to achieve UHC [72].



The following terms should be clarified when mentioning effectiveness [152]:

*Effectiveness*: is the capability of producing an expected target, result, indicator as related to an activity, a strategy or intervention program. Evaluating effectiveness is only based on the outcome gained without accounting for the cost to achieve such an outcome.

*Efficiency*: is the correlation between the output and input.

*Allocative efficiency*: is the allocation of resources across activities in a sector/program so as to achieve the maximized output.

*Technical efficiency*: is the use of a specific resource to achieve the maximum output for a specific activity.

*Cost-effectiveness*: is the relation between the cost and expected results. It is, in health economics, closely linked to cost-effectiveness analysis (CEA) which is an economic assessment method that compares the cost and effectiveness of two or more alternative interventions/health programs for achieving the same desired results. The nature of cost-effectiveness analysis is to measure the increased cost between corresponding options and difference in terms of health benefits of such options [231].

The World Health Report 2010 clearly indicated that the mobilization of sufficient financial resources alone cannot ensure achievement of the UHC goal. Instead sufficient resources must be combined with increasing effectiveness in the use of such financial resources. Increased efficiency will help control cost increases, which implies potential to achieve coverage with the currently available resources. Currently, 20–40 per cent of the resources for health care are wasted. The report also pointed out 10 leading causes of low efficiency with the high cost and unnecessary and irrational use of medicines as the most common. The remaining causes included over-indication of paraclinical services; poor performance by health workers; irrational hospitalization rate and duration of treatment; inappropriate hospital size (low bed occupancy rate); medical errors and lack of quality assurance; waste, corruption and fraud in the health sector; investment in less cost-effective interventions.

Resource waste in the health sector is common in many countries but it is rarely assessed fully. According to the United States Institutes of Medicine, the health system of the United States wastes 750 billion USD per year (accounting for 30 per cent of national health expenditure) [232].

The value of resources available for healthcare in Vietnam could be improved substantially if shortcomings in terms of efficiency in utilization of available resources for healthcare could be addressed, including allocative and technical efficiency. Some areas of inefficiency that need to be addressed include continued reliance on input-based state budget allocation; predominance of fee-for-service provider payments; inappropriate fund pooling and regulating mechanism; lack of cost-effectiveness assessment in determining benefit packages; high the inpatient service use; hospital overcrowding; irrational prices of medicines and health services.

## 5.1. Situation assessment

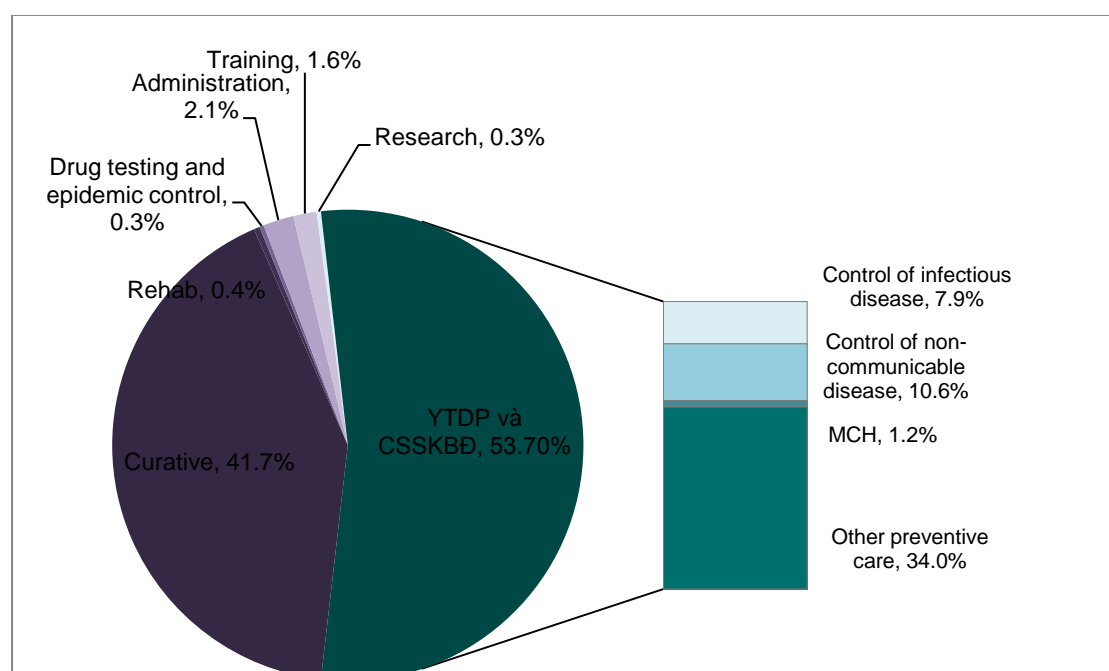
### 5.1.1. Achievements and progress

Vietnam's health system is functioning efficiently in terms of healthcare outcome indicators. Comparing health expenditure per capita of Vietnam (some 76 USD per capita in

2009) with health outcomes, the efficiency of the health system is generally positive compared with many other countries in the world.

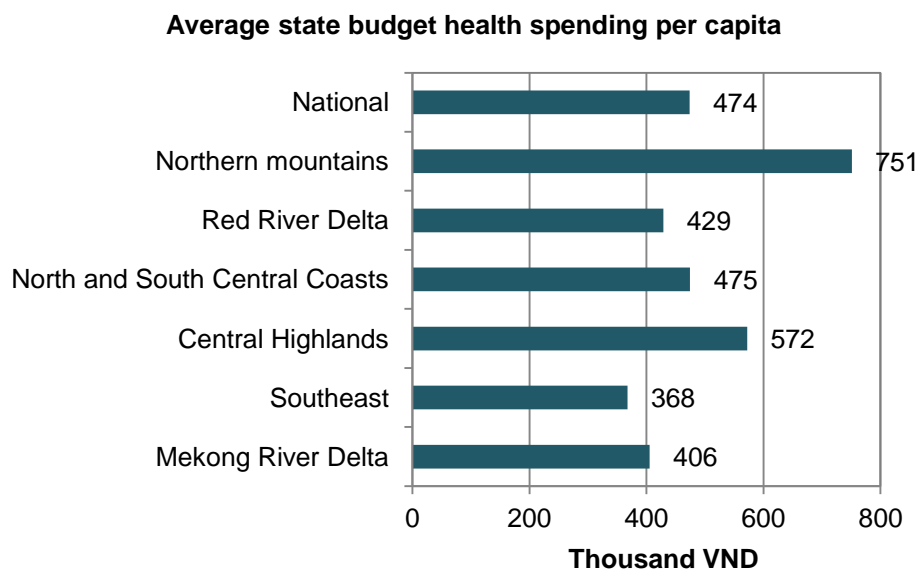
Regarding financial allocation, Vietnam has set priorities to the areas that could bring about high efficiency in healthcare, including preventive care, grassroots healthcare, healthcare for mothers and children and support for healthcare of the poor. Resolution No. 18/2008/QH12 clearly stated: “At least 30 per cent of the health budget should be allocated to preventive care”. The implementation of this Resolution has brought about positive changes in terms of financing the preventive care sector. The share of state budget spent on preventive medicine has increased over time. In 2009, the budget share for the preventive care sector as a portion of government budget share for health reached 31.32 per cent, while for curative care the share was 66.44 per cent [11]. When considering only tax-based state spending (excluding health insurance), the preventive medicine share is 53,7 per cent. The state health sector budget shows clearly the priority placed on preventive and primary care (Figure 23).

**Figure 23: Structure of state budget expenditure on health (including external assistance) by health sector activity, 2009**



Source: National Health Accounts [11]

In addition, priority was also given to remote areas in terms of government budget allocation coefficients set at 1.7–2.4 times in these areas compared with urban areas. The data on health expenditure in 2012 reported by 63 provinces and municipalities reflected this budget allocation mechanism as the highest level of budget expenditure for health per capita was found in two highland regions (Figure 24). These expenditures included those on health care and subsidies for enrolling in social health insurance for the poor and under-6 children.

**Figure 24: State budget health spending per capita by region, 2012**

Source: Ministry of Finance state budget statistics [10]

### 5.1.2. Difficulties and shortcomings

While there are substantial achievements, as mentioned earlier, weaknesses remain in the efficiency in use of the available resources in Vietnam's health system, both in terms of allocative and technical efficiency. Most of the causes of low efficiency in resources use mentioned in the WHO report exist in Vietnam's health system.

Regarding drug costs and utilization, in Vietnam drugs account for 42 per cent of total health spending and account for 70 per cent of total health insurance reimbursements at medical facilities [146]. Due to fragmentation in the organization of competitive tendering for procurement of pharmaceuticals there are large differentials in the winning bid price across medical facilities. Rational and safe use of pharmaceuticals is not yet guaranteed and the proportion of drugs prescribed that are generic or from the essential medicines list is lower than WHO recommendations, while the proportion of prescriptions containing antibiotics is very high, increasing the risk of antibiotic resistance and increasing the cost burden of medicines (See more details in Chapter III, Section 4).

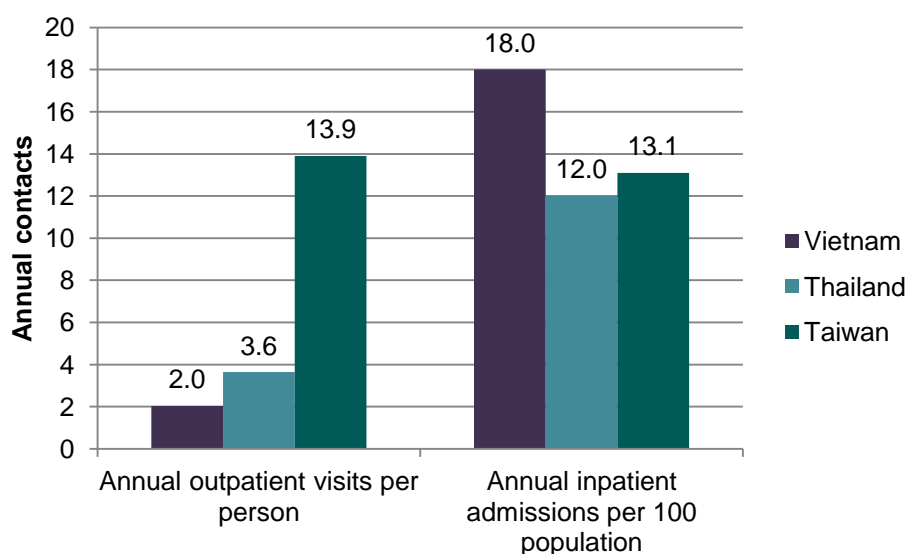
Over prescription of many unnecessary and duplicative services and tests has been acknowledged by the representatives of the VSS and various agencies involved in healthcare service-related sectors. Implementation of hospital autonomy according to Decree No. 43/2006/ND-CP, through which incomes of hospital workers are closely tied to net revenue surplus of the hospital motivates over-servicing to increase hospital revenues. Recent surveys and assessments on the implementation of Decree 43 in 18 public hospitals nationwide showed that the average number of tests/patient contacts increased after implementation of the hospital autonomy. A comparison of figures from 2005 and 2008 indicates an increase in services provided of 1.5 times in fully autonomous hospitals; 1.4 times in hospitals at the national level; 2.1 times in provincial hospitals; and 1.3 times in district hospitals. The average number of CT-scans per patient contact in central hospitals doubled between 2005 and 2008; and in provincial hospitals it tripled. The average number of ultrasound per patient contact increased by 1.4 to 1.5 times in district and provincial hospitals [172]. Health insurance data also indicate that the rate of expenditure on diagnostic imaging and testing as a

proportion of the health insurance reimbursements to facilities was seeing a rapidly increasing trend, especially in national and provincial hospitals.

Fee-for-service provider payments are still the most common mechanism applied to about 64.5 per cent of facilities contracted to be reimbursed by health insurance. With this payment mode, it is very difficult to control costs because it encourages health facilities to deliver as many services as possible. The capitation payment mechanism currently in place does not differ substantially from the existing fee-for-service payment mechanism. The only difference is that facilities are allowed to retain a surplus (between revenues and expenditures) up to 20 per cent of the capitation fund. As a result, despite the application of the capitation-based payment mechanism, the objective of cost control has not been achieved due to reimbursable over-spending in many facilities.

Irrationality of health service delivery in the entire health system also constitutes a factor hindering the efficiency of resource use. First there are irrationalities in use of services across levels of care characterized by overcrowding at the upper level and low capacity utilization in many hospitals at the lower level. Secondly are irrationalities between the mix of inpatient and outpatient services. Data provided by VSS on the utilization of healthcare services by the insured showed substantial underuse of outpatient services compared to clear overuse of inpatient services per enrollee compared with countries that have achieved universal health insurance coverage, such as Thailand and Taiwan (Figure 25).

**Figure 25: Comparison of outpatient service use with inpatient service use of health insurance enrollees in Vietnam, Thailand and Taiwan**



Source: Ministry of Health [124]

From the health system perspective, there was large difference in terms of funding between the curative and preventive care sectors with 72 per cent of the total health expenditure for the curative care sector (including both public and private sectors) and imbalance between levels of facilities (communes provide 30 per cent of examinations covered by health insurance, but are reimbursed less than 10 per cent of total health insurance reimbursements) [21].

Selection of services/medicines to be reimbursed, particularly by health insurance, directly affects the efficiency of use of funding for healthcare. Currently, selection of

technical services and medicines to be reimbursed by the health insurance schemes is not based on evidence of cost-effectiveness. In reality, the list of reimbursable medicines, medical consumables and services is set up mainly based on recommendations by hospitals. A review of the list of major medicines (reimbursed by health insurance) showed a larger percentage of non-essential medicines compared with essential ones.

Prices of services and medicines also significantly influence effectiveness in use of health insurance funds. The price of reimbursable services on the medical service price lists adopted by the provincial People's Committees are based on the health service price ceilings issued by the Ministry of Health and Ministry of Finance. However, implementation of Circular No. 04 on adjustment of the health service price ceilings led to many problems in the lists of service price issued in different localities. By October 2013, 62 out of 63 provinces had adopted new medical service prices with large differences in average price levels across provinces. According to the survey conducted in 43 provincial health bureaus within this study, 41 out of 43 provinces adopted new prices of health services with the average level accounting for 72.2 per cent of the maximum ceiling specified under Circular No. 04. Yet this varied substantially across provinces, from 56.4 per cent to 91 per cent. The dispersion was also high with the interquartile range from 60 per cent to 82.3 per cent. This indicates irrationality in terms of price differences across provinces. Many hospitals in smaller provinces proposed price levels higher than in the large municipalities like Hanoi and Ho Chi Minh City. Some central hospitals apply norms for electricity, water and waste treatment that are higher than other hospitals in the same locality.

Ever increasing healthcare costs: VSS data reveal continuous increases in the average health insurance reimbursement amount for both inpatient and outpatient care over time. The rate of increase over the period 2006–2011 was 19.4 per cent for outpatient care and 13.3 per cent for inpatient care. VSS data also indicate that the growth rate of health insurance reimbursement for high tech expensive services from 2010 to 2011 was 75 per cent, and from 2011 to 2012 was 40 per cent. High tech services were mainly delivered in national and provincial hospitals (95 per cent).

### 5.2. Priority issues

- Health sector resource waste in Vietnam has not been comprehensively studied and evaluated.
- Cost-effectiveness evidence is not yet used for financial allocations or selection of services/drugs to be reimbursed.
- Efficiency in using health financing resources in Vietnam is low, due to outstanding problems, such as: (i) the absence of an appropriate payment mechanism to incentivize healthcare provision behaviors towards: cost control, elimination of over prescription of unnecessary services and drugs, quality assurance and prioritizing PHC; (ii) payment for medical services still reliant heavily on fee-for-service; (iii) absence of measures to make medicine and health service price transparent in the entire health insurance system as well as measures to control drug prices, including generic policy and centralized medicine supply model; (iv) Unnecessary admissions are high (20 per cent).

### 5.3. Recommendations

Based on the earlier analyses, the following solutions are recommended for improving efficiency of using the available financial resources:

- Conduct a study to reveal major causes of resource waste in the health sector to serve as a basis for finding long-term solutions and improving awareness and accountability of health regulatory authorities at all levels.
- Reform provider payment methods to include an appropriate combination of three different mechanisms: capitation, fee-for-service and case mix. Further develop the capitation payment mechanism to extend to PHC facilities. Promote piloting of other payment mechanisms such as results-based financing and case mix.
- Review benefit packages in comparison with strict criteria, paying attention to use of cost-effectiveness studies for choosing services to be covered by health insurance.
- Strengthen capacity for health technology assessment, learn from international experience in the region and globally in the field of health technology assessment and utilization of results for providing evidence to select appropriate and cost-effective medicines and medical devices.
- Promote rational use of medicines through the issuance of national treatment guidelines, continuing medical education to improve knowledge for prescribers and pharmaceutical staff and communicating on rational and safe use of medicines to the general population.
- Strengthen effectiveness of various measures to control medicine price, including systematic and strong implementation of the generic medicine policy and study of a centralized medicine supply model. Promote transparency related to prices of medicines and health services; set up a medicine and health service price monitoring system in the entire health insurance reimbursement system.

## **6. Renovating payment modes in the UHC process**

### **6.1. Role of provider payment methods**

Provider payments are seen as one of the five control knobs of the health system [233]. Through financial and non-financial incentives, the payment mechanism can influence behavior of service provider organizations and individuals, as well as service users. It should be noted, however, that such incentives can lead to moral hazard, when the party with an information advantage is motivated to act in his own self-interest regardless of possible harm he may cause to the party with information disadvantage.

In order to achieve UHC, payment methods should be applied with appropriate incentives for use of available resources in an equity-oriented manner, to achieve the highest level of effectiveness and to minimize moral hazard in order to orient the service delivery system towards intensive and extensive coverage. Furthermore, provider payment methods should be able to curb irrational cost escalation and involve the harmonization of relevant payment methods for different types of services.

This section of the Report will generally assess impacts of various payment methods and incentives related to organization of basic health service provision and use in Vietnam; positive and negative impacts on universal coverage related to provider payment methods, and the topping up of salaries for service providers as part of implementation of the financial autonomy policy; identification of priorities and recommendations for solutions related to reforming provider payment methods aimed at promoting UHC, especially necessary policy options in the context of limited resources of a developing economy.



## 6.2. Application of different payment methods in Vietnam

Healthcare services in Vietnam have experienced a long history of *input-based budget allocation* (i.e. based on number of patient beds in curative care sector/hospitals and number of staff members in the preventive care sector). Since the initiation of the partial user fee policy in 1989 [234], fee-for-service payments<sup>6</sup> were applied in parallel with the line-item state budget allocation, and have gradually become the main payment mechanism in the health system. Payment using the capitation method has only been piloted since 2005, and has been scaled up rapidly to most provinces and first-level care facilities. Case mix payments have only been applied to a limited number of diagnostic groups, and work is ongoing to prepare the necessary databases for development and application at a larger scale. A results-based financing mechanism is now being piloted in some communes in Nghe An province. Generally, the predominant provider payment method applied in health facilities is still fee-for-service. The general orientation for reforms will enable efforts to develop and refine various payment mechanisms to supplement and gradually replace the current fee-for-service mechanism.

### 6.2.1 Budget allocation based on government budget expenditure item

This payment mechanism is currently applied in national health target programs and for payment of official payroll, part of operating overheads and part of depreciation and maintenance of equipment in state health facilities.

Funding for national target health programs consists of allocating budgets for vertical programs. According to Decision No. 1208/QĐ-TTg dated 4 September 2012 of the Prime Minister, the National Target Health Program 2012–2015 has total funding of 12.77 trillion VND for its 5 component projects [42]. Annual funding for national target health programs accounts for a very modest proportion of total health expenditure (some 3–4 trillion VND compared to the total of about 137 trillion VND in 2010 [11]) and does not experience the same rapid growth as total health expenditure.

In the preventive care sector, and most curative care facilities (those not yet implementing full autonomy), payment of part of costs of service provision through the state budget, to varying degrees, has helped to restrict dependence of facilities on revenues from service fees paid out-of-pocket by patients. This payment mechanism helps the facilities have a relatively stable amount of resources for delivering health services, especially for groups of services with low potential for cost recovery. This payment mode, to a certain extent, may contribute to reducing barriers in access to health services for those who have to make direct out-of-pocket payments.

Weaknesses of the budget allocation mechanism include both equity and efficiency. The opportunity to benefit from government budget allocations for low-income groups is low because they have poor access to health facilities at the upper technical levels. In addition, this mechanism is based on inputs (i.e. mainly based on the number of staff members for the preventive care sector and number of patient beds in the curative care sector) without a linkage between the resources used and the outcomes or quality of services. Hence, shifting from a payment mechanism based on inputs towards one paying based on outcomes is recommended for policy research and development efforts in the future.

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<sup>6</sup> According to the Law on Health insurance, fee-for-service payments is the reimbursement based on costs of drugs, chemicals, consumables, medical equipment, medical technical services used by the patient.

### **6.2.2. Fee-for-service payments**

Fee-for-service payments (i.e. payment made for each individual service such as consultation, test, image, medical intervention, or other specific services) is currently the dominant payment mechanism applied throughout the curative care system in Vietnam, for payment out-of-pocket by households or reimbursement by the health insurance fund in public hospitals at the central and provincial levels, while district hospitals are transitioning to capitation payments.

This payment mechanism has its own strengths if combined with an appropriate price setting mechanism to control costs. When the revenue is directly related to the volume of services, with prices set higher than costs of deliver services, it promotes productivity in providing hospital services, and furthermore, it promotes performance of the entire health service delivery system. This payment mechanism should be considered for application to types of services whose delivery and use should be encouraged because they are being underprovided. Nevertheless, it is important to identify public funding sources to pay for underprovided services that need to be incentivized by this provider payment mechanism. The price levels in the fee-for-service mechanism should be set rationally, after consideration of costs of provision and the need to incentivize specific policy targets in order to reduce dependency of the service provider on out-of-pocket payments from service users. This condition is important for minimizing financial barriers to access to and use of services.

The fee-for-service mechanism is considered to have many weaknesses such as creating financial barriers that prevent the population, especially low-income groups, from accessing and utilizing basic health services [235, 236]. Moreover, when information on costs is incompletely evaluated and when prices are set higher than costs, health facilities are still encouraged to deliver more services than necessary, since payments are based on the volume of services provided regardless of quality of care.

Regulations on fee-for-service payments for services paid through health insurance currently are contributing to the fragmentation of the health insurance fund across provinces. When first level care facilities choose to be paid on a fee-for-service basis, the payment ceiling cannot exceed the amount of insurance funds allocated for medical services at that facility, while this amount is calculated to be equivalent to 90 per cent of total health insurance revenues contributed by people registered for care at that facility. Thus the funds for medical care in a locality depend on the revenues of that locality, and provinces that have a large number of people contributing large amounts will have a large amount of funds to pay for medical services and vice versa.

### **6.2.3. Capitation method**

With this capitation mode, the service provider is paid a certain amount per insured registering for health services at that health facility. The capitation budget is pre-determined based on the total number of insured individuals registered for care at a facility, and is used to cover the services included in the contract over a certain fixed time period (typically a year). The capitation payment mechanism is increasingly being used in systems that integrate various payment methods for different health service providers at different levels of care, especially at the district level. Since 2005, the capitation mechanism was included in health financing policy as one of three possible reimbursement mechanisms for payment from the health insurance fund for curative care services at facilities approved for health insurance reimbursement. A roadmap is in place to extend this provider payment mechanism to 100 per cent of first level of care health facilities by 2015. By 2012, according to VSS, 58 out of 63 provinces had applied this payment method. Out of 1951 first level health facilities slated to

be paid by this method, 786 had already applied capitation payments by 2012 (40.2 per cent), of which 175 applied capitation to outpatient services and 611 applied it to both inpatient and outpatient services [237].

Recent research studies have contributed to affirmation of the potential of the capitation payment mechanism in healthcare delivery towards increasing efficiency of resource use through promotion of early care in the community. Specifically, capitation payments may help to mitigate the possibility of cost escalation in curative care reimbursements from health insurance compared to the fee-for-service payments [238] by containing costs of unnecessary laboratory testing and diagnostic imaging.

Nevertheless, the capitation payment mechanism, as currently designed, lacks appropriate provisions for management instruments and quality improvement measures, particularly with the prevalence of capitation deficits that have arisen in many health facilities. The most fundamental weaknesses of the current capitation payment mechanism include:

(i) Design that lacks a systematic approach and does not comply with principles and requirements of risk adjustment for the actual case mix and need for healthcare.

(ii) Fragmentation of the health insurance pool across localities and across insured groups nationwide and within each province because the capitation rate paid to facilities for each of the six insured groups is based on historical expenditures and because regulations on the total capitation fund allocated to each facility applying capitation depends on total health insurance revenues in the facility. Thus, poor provinces will have lower capitation rates and lower capitation funds than richer provinces.

(iii) Low capitation rate that is insufficient to cover the costs of health service delivery.

(iv) Inappropriate mechanism for payment of referral cases, causing difficulties for the first level facility managing the capitation fund who has no control over payment for care provided at higher level facilities with referrals or bypassing.

Efforts to further develop the capitation payment mechanism have received a consensus of support from various stakeholders in an orientation towards harmonious integration of incentives for productivity and service quality, while protecting health facilities from financial risks. With this orientation, the capitation rate needs to be set at a level to achieve a rational balance between the ability to satisfy cost recovery requirements and adequate risk pooling scale to limit risks of deficit for service providers, especially at the district level.

#### **6.2.4. Case mix payments**

The Law on Health Insurance and Decree 85 [110] stipulate the application of various payment methods, including case mix for application to inpatient care services in hospitals at different levels of the health system. District hospitals and other first level facilities currently applying the capitation mechanism for all outpatient and inpatient care services will eventually move towards a combination of case mix for inpatient care and capitation for outpatient care under a global budget. In general, the orientation for medical service payments is shifting towards linking payment budgets to performance.

A simple case mix payment mechanism (package prices for a few conditions) has been piloted since 2010 at a modest scale in 2 hospitals (Thanh Nhan and Ba Vi district hospitals) in Hanoi. Studies are being undertaken for the development of the case mix

payment mechanism. Case mix payments, according to plans, will be scaled up by 2015 to cover about 26 diagnostic groups in more than 30 hospitals in 9 provinces.

The Ministry of Health, with the focal point being the Department of Planning and Finance, continues to undertake research (with technical support from the World Bank, ADB, IHPP (Thailand), and NICE (UK)) to develop a system with a harmonious combination of various payment mechanisms. Particularly, capitation payments are to be applied to outpatient care services, disease management and community-based healthcare and health promotion activities, while case mix payments will be applied to inpatient care. The design of the capitation method will focus on specific requirements: (i) capitation based on full and more systematic accounting of cost variation; (ii) capitation fund and capitation rates are to be set with necessary adjustments to accord with the need for healthcare, for example, adjustment according to basic factors such as population, age structure, gender and especially disease burden specific to geographic region and socio-economic status.

### **6.2.5. Results-based financing**

With increasing interest in quality of basic healthcare, the results based financing mechanism is seen as a potentially promising one with a focus on quality of care and cost containment. This payment mechanism encourages health workers at the grassroots level to address weaknesses that are well known to them but for which they are not motivated and/or not encouraged to address. Results based financing can play an important role in the process of achieving UHC. However, it is also accompanied by complex requirements in terms of technical capacity, including initial development, implementation, monitoring, evaluation and continuous refinement.

Results based financing mechanisms encourage the concentration of resources on the grassroots level and payment based on performance, outputs and results with specific quality requirements/conditions, rather than based on inputs. This is seen as a promising provider payment method and is actively being expanded in several countries and being piloted in many different health systems. Results based financing pilot projects at a small scale are also in initial stages of development in Vietnam (e.g. the North Central Coast Health Support Project is piloting results based financing in 24 communes in 2 districts in Nghe An province) and are expected to provide information and evidence for the expansion of this new payment mechanism in Vietnam.

## **6.3. General evaluation**

### **6.3.1. Achievements and progress**

Policies on incentives and allowance for health workers in extremely socio-economically disadvantaged areas have contributed to gradually addressing the uniformity of payments and salary supplements across localities of different levels of disadvantage and begun to encourage increased performance of health workers [107, 239-242].

Policies on salary supplements for direct service provision and to attract health workers (70 per cent of the salary) and other allowances such as training and education allowance have contributed to motivating and attracting health workers to serve in priority localities or in specialties with generally less opportunity for income generation, contributing to supplementation of additional incomes for state health workers.

The budget allocation mechanism with priority given to prioritized healthcare projects and national target health programs and the government budget share for facilities that cannot yet implement full financial autonomy, enables the availability of relatively stable resources

for healthcare delivery, especially as related to the services where cost recovery is not feasible. National target health programs such as the expanded program on immunization and community-based chronic diseases management and care (such as diabetes, cardio-vascular diseases, asthma, etc.) are pragmatic solutions that enhance and sustain widespread coverage of early care, screening examination, diagnosis and treatment of common diseases. They also help to improve knowledge of the population through their participation in community-based healthcare programs [218].

The policy orientation of shifting from supply-side state subsidies to demand-side subsidies through state budget contributions to the social health insurance fund for certain entitlement groups will actively contribute to addressing weaknesses related to equity in benefits of various population groups and improve efficiency in use of resources due to stronger links between funding and performance.

A notable development is the transformation of VSS into a major health service purchaser with a more active role in verification and control over costs and service quality. This is an important prerequisite for the process of enhancing capacity for developing and implementing different payment methods aimed at achieving prioritized targets in the UHC process.

### 6.3.2. Difficulties and shortcomings

Policy consensus has not yet been achieved regarding agreement on the role and responsibility of various stakeholders, as well as on resource allocation and a roadmap with a specific timeline to systematically reform provider payment mechanisms.

The fee-for-service mechanism has widely recognized negative effects on the UHC goal, yet it remains the major payment mechanism applied in the medical care system and creates financial barriers to access and use of essential healthcare services [235, 236]. For people paying out-of-pocket for health services, this creates risks of catastrophic expenditures and impoverishment [149].

The fee-for-service payment mechanism currently in place does not sufficiently encourage an integrated model of care. For instance, it does not encourage the provision of cost-effective services such as early care at the community level or hospital infection prevention and control. Co-payments (5–20 per cent applied to different types of beneficiaries when using medical services from the district level and higher when costs exceed 15 per cent of the minimum wage; and co-payments of 30, 50 or 70 per cent when bypassing the first level care facility) related to all hospital care services may still be a financial burden on low-income groups, particularly poor and near poor households. In reality, low ability to make co-payments, or high self-medication costs also constitute barriers to access and use of basic healthcare services.

For all the various provider payment methods an increasingly important task for achieving UHC is determination of the scope of services to be covered in an effort to rationally encourage use of cost-effective services, drugs and medical interventions to meet policy objectives. In this regard, health technology assessment capacity (including assessment of drugs, medical equipment, medical interventions, not only in curative care, but also in preventive medicine and rehabilitation) currently is quite too limited to be able to meet requirements for providing evidence for choices of drugs and medical services in the basic medical service package.

Inadequate conditions exist for a basic transformation of the fee-for-service payment mechanism. Other payment mechanisms such as capitation and case mix are being rolled out



gradually. The major weaknesses of these payment mechanisms relates to the absence of effective and systematic quality management and continuous quality improvement mechanisms and information systems.

Remuneration of health facility staff involves incentives that directly affect productivity and quality of services. From this perspective, promoting financial autonomy and social mobilization can have positive impacts on UHC by creating a mechanism for linking the interest of health facilities and income of health workers to performance through encouraging service delivery capacity and quality, contributing to expanding the coverage in terms of both volume and types of health services provided. Nevertheless, these policies also have weaknesses, specifically they encourage health facilities to focus strongly on high tech services without due attention paid to basic health services, which are seen as having lower potential for revenue generation. The result is that they encourage overprovision of high tech services, escalate service costs and impede people's access to health services, especially the poor and vulnerable groups.

Assessment of the results of strengthening financial autonomy in health facilities according to Decree No. 43/2006/ND-CP has identified some fundamental weaknesses and unexpected results related to irrational delivery and use of healthcare services. The current mechanism of linking revenues of health facilities and supplementary income of health workers to facility performance provides insufficient motivation for health facilities and health workers at the grassroots level to increase provision of basic health services, especially in the preventive care sector. Health facilities have to generate revenues in order to pay their workers supplementary income. The additional revenues for topping up salaries come primarily from profit sharing arrangements related to capital contributions to invest in facilities and equipment. These arrangements are only really effective in socio-economically affluent areas, in the curative care sector and specialties that are more marketable. The financial autonomy and social mobilization mechanisms lead to increased inequality because they have little effect on the incomes and remuneration package for health workers in socio-economic disadvantaged areas or those providing services with little revenue generation potential (e.g. preventive care services, tuberculosis, leprosy, mental health programs as opposed to high tech services).

When financial autonomy in health facilities is accompanied by a lack of regulations and when revenue maximization objectives still predominate, factors necessary for cost management and service quality improvement do not receive adequate attention from health facilities. Within social health insurance, the fee-for-service payment mechanism is considered as one of the main causes of increased healthcare costs [243].

Efforts at enhancing financial autonomy and promoting social mobilization are expected to bring about positive changes that help health facilities to invest in equipment and better infrastructure to continuously increase service delivery capacity and expand the scope of services provided. Nevertheless, support and coordination are required to provide more appropriate encouragement/incentives to health workers in sectors with less potential, especially those at the grassroots level. It is important that the policy solutions, which enable sustainable development of the grassroots healthcare network and of specialties with lower revenue-generating potential, are not dependent on facility ability to generate revenues from service provision, particularly through social mobilization of facility investments for profit-sharing. Policy interventions should also be oriented more to the general targets of the health system, as the success of a health system is characterized by universal coverage rather than purely by income.



From the perspective of healthcare services, hospitals at the higher technical levels, which benefit from advantages of higher payment level for the same basic health services, are in a position to dominate and consequently to weaken health facilities at the lower level. Despite efforts to promote performance of the PHC level, assigning it a role as first contact with the health system, hospitals at all levels continue to be the main facilities providing healthcare services, including even basic PHC services. This is obviously an undesired outcome with the health system orientation towards equity and efficiency. The inclination towards revenue maximization, that is not balanced with benefits to service users, constitutes a great barrier to implementation of programs for reforming provider payments for healthcare services in a rational and transparent manner.

Lastly, *informal payments*, in the absence of a solution to eliminate them, will continue to prove a major challenge in attempts to reform provider payments. The goals of increasing efficiency of resource use through rational service delivery at appropriate technical levels of care and ensuring equitable access and use of basic quality healthcare services regardless of ability to pay will be difficult to achieve if informal payments continue in parallel with official payments (including fee-for-service, capitation or case mix).

#### **6.4. Priority issues**

From the above situation analysis, the following priority issues have been identified.

##### **6.4.1. Provider payments are not actively used as a health system control knob due to a lack of necessary preconditions and resistance to change**

- The fee-for-service payment mechanism still predominates.
- Direct out-of-pocket payments for health care account for a large share; while the proportion of total health spending channeled through social health insurance remains low.
- Growth in development of higher quality services for which a fee premium is charged and other perverse effects of financial autonomy and social mobilization at public medical facilities is negatively affecting basic service provision for a majority of the population and has led to resistance towards applying new provider payments methods.

##### **6.4.2. Many challenges hindering research and application of new provider payment methods**

- Long-term orientation and policy consensus have not yet been achieved, including agreement on assignment of the role and responsibility for development and implementation of provider payment reforms.
- Many limitations to the capacity to study and apply new provider payment methods, including inadequate technical capacity to initiate reforms (including agencies managing the health system, the purchasing agency (VSS) and health service provider facilities) and capacity for developing information systems and using information in development of medical service provider payment mechanisms.
- The VSS has not been assigned an active function in developing and implementing provider payments, and their capacity remains limited.

#### **6.4.3. Application of capitation payments currently lacks a comprehensive design and appropriate mechanism to manage quality improvement**

- The mechanism for payments in the case of referrals, bypassing and multi-level care are inappropriately designed, leading to many difficulties, particularly a lack of active fund management among the fund holding first level care facilities.

### **6.5. Recommendations**

In order to gradually address the priorities mentioned earlier, the following recommendations are proposed.

#### **6.5.1. Develop a comprehensive program for reforming provider payments to become an active control knob of the health system.**

- Work towards a policy consensus and determine clearly the roles and responsibilities of related parties. Promote rapid application of a provider payment system that integrates harmoniously new and more appropriate provider payment mechanisms (capitation, case mix and fee-for-service).
- More strongly promote the shift from state supply-side subsidies (including preventive facilities) towards state demand-side subsidies to users of health services.
- Review resources and provider payments for different preventive medicine services, including community-based management and care, to ensure these services are covered in a basic service package on the basis of equitable and sustainable financing. Excluding public health services currently included in national programs subsidized directly through the state budget, other services such as PHC, community-based care and management of disease could be paid through the health insurance fund and integrated into costing and management through a capitation system.

#### **6.5.2. Adjust capitation design to meet specific requirements**

- Adjust capitation rates based on more systematic cost accounting methods.
- Set up the capitation fund and capitation rates with necessary risk adjustments including population, age and sex structure and regional disease burden.
- Incorporate the PHC package (which is not under national target health programs and not covered by health insurance schemes) into a basic healthcare service package to be paid for by the health insurance fund and ensure reasonableness and consistency with service quality management solutions.
- Adjust the amounts reimbursed to facilities (including fee-for-service prices and case mix payments) towards parity with grassroots level for services/service groups that could reasonably be delivered (from a technical and economic perspective) at the grassroots level. The service prices should be adjusted (no higher than the marginal cost) to not encourage over-delivery of services.
- Study how to eliminate co-payments for the poor.
- Promote capacity development for research on health technology assessment (in preventive medicine, curative care and rehabilitation) to serve reforms of provider payments through appropriate choice of drugs and services; on rational provider payment methods; and on integrated application of incentives, both pecuniary and non-pecuniary, for providers to encourage increased access and use of services at the

grassroots level. Promote research and implement a consistent set of measures to reduce informal payments.

**6.5.3. Reform provider payments consistently with reforms of the health services network and other related financing mechanisms to ensure basic prerequisites for applying advanced provider payment methods.**

- Implement greater linkages in management and provision of preventive and curative care.
- Strive to promote healthcare facilities to operate with the attitude that “the fewer the patients, the fewer the sicknesses, the greater the benefits” to replace the current attitude that “the more the patients the greater the revenues of the hospital, the more the disease outbreaks the greater the revenues of preventive medicine facilities.”
- Strengthen financial resources and the role of third-party payer (VSS); reduce the out-of-pocket share in total health expenditures.
- Develop methods to limit negative effects of implementing financial autonomy (gradually consolidate all services provided by public facilities under health insurance coverage, including the current “on-request services”).
- Organize appropriate amounts of resources for continuous supervision, evaluation, adjustment and revisions of policies and the contents of a general health financing reform program, with specific measures for provider payment reforms.
- Strengthen international cooperation to continue to strongly promote capitation design adjustments (currently undertaking cost accounting for capitation); implement projects on capacity building for the health management information system, focusing on basic technical issues, including standardization of databases, setting up a standard/ minimum data set and clinical coding using ICD-10 and ICD9-CM.

## **PART THREE: CONCLUSIONS AND RECOMMENDATIONS**

## Chapter V: Conclusions

The JAHR 2013 Report was compiled in the third year of implementing the Resolution of the 11<sup>th</sup> National Congress of the Communist Party of Vietnam and the Five-year plan for the Protection, Care and Promotion of the People's Health 2011–2015. The report has (i) presented an update on the health system situation, including new policies and the implementation status for goals and tasks laid out in the Five-year plan for the health sector, 2011–2015 and progress in implementing the health-related MDGs and Vietnam's health goals; (ii) provided in-depth analysis on the topic of “Towards *universal health coverage*” – a topic of particularly high interest to health policymakers.

The main findings of the Report appear in the summary below.

### 1. Update on the situation of the health system

#### 1.1. Major tasks of the health sector in 2013

Major tasks of the health sector in 2013 were presented by the Minister of Health in the conference on 2012 health care performance and initiation of task implementation for 2013 including: strengthen health sector governance capacity; focus on implementing the project to reduce hospital overcrowding, continue to implement Project 1816 and projects on satellite hospitals and family doctors; improve the quality of medical examination and treatment and increase patient satisfaction; urgently carry out the Project on implementation of the roadmap towards universal health insurance; implement remuneration policies for government health workers and officials; actively implement epidemiological surveillance to detect and promptly prevent and control major disease outbreaks, particularly outbreaks of emerging diseases; effectively implement national target programs on health, population and family planning, HIV/AIDS and food safety; promote health environmental management activities; coordinate with other agencies to strictly implement mechanisms and policies for food safety; focus on reducing fertility in regions with high fertility, maintain reasonably low birth rates; reduce the rate of increase in the sex ratio at birth; expand antenatal screening, neonatal screening, counseling and premarital health care; reform operational and financial mechanisms applied in state hospitals linked with service quality improvement; Ensure adequate supply of essential medicines for medical treatment; regulate competitive tendering for drug procurement, drug prescription, prices and quality; improve the effectiveness of health information, education and communication for health-related behavioral change; reform administrative procedures in licensing medical and pharmaceutical practice, and pharmaceutical products for domestic distribution; promote the application of information technology in health sector management.

#### 1.2. Implementation of the Plan for the protection, care and promotion of the people's health for the period 2011–2015

Achievements and progress as well as difficulties and shortcomings in implementation of key tasks of the Five-year plan 2011–2015 are summarize in the sections below.

##### 1) Health sector governance

The Five-year plan laid out the following tasks: 1) Improve capacity to develop and quality of health sector strategies, policies and master plans; 2) Consolidate, refine and stabilize the organization of the health sector; 3) Strengthen the capacity for health system management and planning; 4) Strengthen inspections, verification and supervision; 5)

Strengthen participation of stakeholders in the process of policy formulation, plan development and implementation; 6) Promote appropriate measures of social mobilization and encourage all economic sectors to invest in development of health services. The situation of implementing these tasks is summarized below:

### **Achievements and progress**

- The Ministry of Health has developed many new legal documents and submitted them to the relevant authorities for approval; the Ministry is actively developing projects to submit to the Government according to the annual program for development of legal documents and has assigned responsibility to specific departments and administrations to lead development of various projects. Of particular importance are the Strategy for the protection, care and promotion of the people's health for the period to 2020 that was approved by the Prime Minister in 2013, and ongoing work of the Ministry of Health in the process of revising the Law on Health Insurance and Law on Pharmaceuticals.
- The organization of the Ministry of Health was adjusted, with some new departments and administrations added. Two new vice-ministers were appointed by the Prime Minister in 2013. The organization of the grassroots healthcare network (according to Prime Ministerial Decision No. 58/1994/TTg) is being reviewed and assessed in order to develop a new Decree (planned for 2013).
- The Ministry of Health has a plan for comprehensive reforms of health sector planning work. The Ministry is actively implementing activities in the EU-WHO Health Policy Dialogue Program (assessment of plans, reforms of health statistics). The program is in the process of developing a framework for annual provincial health plans and a set of tools for assessment of health plans following the JANS model (support from Delegation of the European Union in Vietnam and the Rockefeller Foundation).
- The Ministry of Health has guided implementation of sanctions for administrative violations in 5 health sector areas, trained specialized health inspectors at the central and provincial levels and strengthened anti-corruption activities.
- The Ministry of Health has posted draft legal documents on its webpage, organized workshops and seminars to obtain feedback, and requested that international partners provide technical assistance.
- The Ministry of Health is collaborating with the Ministry of Finance to develop documents for guiding social mobilization in the areas of medical services and preventive medicine, to promote the participation of the private sector in health and strengthen the role of professional associations in management of the health sector.
- On the basis of results of implementation of health-related MDGs in 2012, the Ministry of Health is developing a draft "Government Resolution on acceleration of implementation of health-related MDGs by 2015"; has submitted for Politburo approval a draft Resolution on strengthening PHC; and is preparing a decree on functions and human resources for commune health stations to submit to the Prime Minister for approval in 2013.

### **Difficulties and shortcomings**

- The system of health sector legislation suffers from inconsistencies and does not yet meet the requirements for good governance.



- The volume of policies that need to be developed is great, while the capacity of the policymaking units in the Ministry of Health remains limited. Health information and data are insufficient, delayed, and with low reliability, limiting the ability to make policy based on evidence.
- Inspection work is mainly implemented after incidents have occurred. Checking and supervision are not yet supportive in nature. Monitoring and evaluating progress in implementation of health policies by Ministry of Health departments and administrations and provincial health bureaus remains limited. The organizational structure and human resources for inspection are insufficient; the district level lacks an inspection function. Capacity and qualifications of inspectors remain inadequate.
- The involvement of stakeholders in policymaking is constrained; some channels for contributing comments are ineffective. The role of localities in reforming planning and budgeting remain limited. There are still no state regulations on the role of professional organizations in quality management.
- Financial resources for implementing strategies and plans are not secured, thus hindering their effectiveness.
- Implementation of the social mobilization policy in state health facilities lacks management and regulation and has led to some undesirable effects. Although there are some incentive policies to encourage private investments, there are still barriers such as local policies, land and tax policies. There is not yet a clear financial mechanism to encourage collaboration between public and private sectors.

## 2) Human resources for health

The Five-year plan has laid out several tasks including: 1) Prioritize investments in upgrading of health worker training institutions, improving quality of instruction, reforming the curriculum, training materials and methods; 2) Develop human resources for the health sector in terms of sufficient quality, balanced structure and distribution. Continue to implement projects to train health workers to meet the need in rural, mountainous and disadvantaged areas; 3) Develop standards of necessary skills and competencies for each type of health worker; 4) Effectively manage and use health human resources. The status of implementing these tasks is summarized below:

### Achievements and progress

- Training curricula are developed on the basis of a curriculum framework of the Ministry of Education and Training and are updated and revised annually. A four-year university training program on midwifery at the bachelor's degree level is being developed and will be approved in 2014 with a focus on competency and in line with internationally recommended standards.
- The number of health workers continues to increase, especially at the grassroots level. In 2012, 76 per cent of commune health stations had doctors while the target set out for 2012 was 74 per cent. Training projects for trainees recruited directly from their medical facilities and others from localities where they are expected to return continue to be implemented.
- The Prime Minister has approved the project aimed at encouraging training and development of health human resources for tuberculosis, leprosy, mental illness, forensic testing and pathology specialties for the period 2013–2020 and has promulgated regulations on temporary secondment of practitioners at medical care

facilities in order to gradually improve service quality at lower levels and in disadvantaged areas. The Ministry of Health has approved the project of bringing young volunteer doctors to work in mountainous, remote, borderland and maritime areas as well as in areas with socio-economic difficulties.

- The Ministry of Health has issued regulations on standards, functions and obligations of village health workers (including village-based ethnic minority midwives) and is developing regulations on incentive policies, functions and obligations of commune health stations while coordinating with other ministries to provide guidelines on implementation of special salary supplements at state health facilities. The project for development of Family Medicine clinics has also been approved.
- The Department of Organization and Personnel is developing human resources official statistical forms to serve health human resources planning.
- To strengthen the village health worker network, the Ministry of Health has issued Circular No. 07/2013/TT-BYT, dated 8 March 2013 on functions of village health workers, including village-based ethnic minority midwives. This circular is considered an appropriate policy to overcome the shortage in human resources at the village level, especially in remote and mountainous regions.
- The Ministry of Health is currently developing national competencies for midwives in Vietnam, following 2010 recommendations of the International Confederation for Midwives, and will submit them for approval in 2013.

### **Difficulties and shortcomings**

- Training quality is incommensurate with advanced technology and people's demand for health care. New training programs and continuing medical education have not yet received adequate attention and have not been updated. There is not yet adequate time allocation in training curriculum for medical practice skills; a system of quality accreditation and quality control of medical school graduates has not been developed; facilities of training establishments remain inadequate.
- Shortage of health workers and qualified doctors at the grassroots level is still widespread; many health facilities at the commune and district level do not have doctors. Coverage of regulations on special salary supplements remains relatively narrow, applied in only 62 communes of 2112 districts; special salary supplements are not high enough and do not improve living and working conditions and training opportunities for health workers.
- The proportion of health workers with adequate knowledge and skills in first aid, diagnosis, treatment, and response to disease outbreaks is low, particularly, practical skills of newly graduated doctors remain weak.
- Planning for health human resources management has not been implemented, a database for training and utilization of human resources in private training establishments has not yet been developed.
- Financial resources to pay incentives and allowances for services provided at commune health stations and for outreach activities at the commune level are insufficient, leading to difficulties in implementing human resource related policies.

### 3) Health financing

The Five-year plan set out the following tasks: 1) Increase public spending on health through increasing state budget spending on health and expanding health insurance coverage; 2) Sustainably develop health insurance, implement the roadmap towards universal health insurance coverage; 3) Reform the operational and financial mechanism in state sector health service facilities; 4) Reform health service provider payments.

Implementation of these tasks is summarized as follows:

#### Achievements and progress

- In 2012, the share of state budget spending on health of total recurrent expenditure remained stable at 8.28 per cent. The growth rate of total state spending on health has been higher than the growth rate of overall state budget recurrent expenditures in the period 2008–2013.
- The national health target programs were allocated 1.7 trillion VND from state budget in 2012. State budget spending on the insurance premium for the poor and children under age six accounted for 17.1 per cent of total state budget expenditures on health. The projects for upgrading health facilities disbursed 21 454 billion from government bond revenues. In 2012, the total number of ODA projects managed by the Ministry of Health was 52, with a total value of approximately 1.5 billion USD.
- Health insurance was estimated to cover 66.8 per cent of the population in 2012. The insured receiving partial or total support from state budget accounted for over 60 per cent.
- The Politburo issued Resolution No. 21 (2012) on health insurance, paving the way for active involvement of local governments in health insurance. The Prime Minister approved Decision No. 538 on implementation of the roadmap towards universal health insurance. A draft revision to the Law on Health Insurance was developed.
- State budget spending on preventive medicine reached 31.32 per cent in 2009. Priority coefficients for state budget allocation for remote and mountainous areas were 1.7–2.4 times higher than for urban areas. State budget expenditure on health per capita is highest in two mountainous regions: the Northern midlands and mountains and the Central Highlands.
- Some external assistance projects and technical support projects have facilitated implementation of reform of budget allocation towards performance-based payments.
- Decree 85/2012 has created a roadmap for the transition in operational and financial mechanisms of state health service facilities. The Circular on the new medical service price schedule for state facilities has been implemented since 2012. Some 62 out of 63 provinces and all 35 central hospitals have applied the new medical service price schedule.
- In 2012, some 42 per cent of first level health facilities applied capitation payments. Only 5 provinces have not yet applied capitation payments. A circular on applying capitation payments for insured medical examination and treatment services is being developed in order to resolve limitations of this method of payment. Case mix payments are being piloted for 26 diseases with assistance from ADB and AusAID.

### **Difficulties and shortcomings**

- Macroeconomic difficulties and a tight fiscal policy issued according to Government Resolution No. 11/NQ-CP (2011) have negatively affected achievement of the target of increasing budget expenditure on health. The growth rate state budget expenditure on health has fallen markedly in the last three years. The share of budget spending on health in state budget estimates for 2013 has fallen slightly to 8.1 per cent, much lower than the planned target of 10 per cent.
- Legislation to ensure compliance with regulations on compulsory health insurance remain inadequate. Provider payment methods remain inappropriate. Management of the health insurance fund in medical facilities has been ineffective; management capacity of VSS does not meet requirements. The health management information system remains weak. Health insurance coverage for some groups including the near poor, the voluntarily insured and workers in enterprises is relatively low. Sustainability and efficiency in management and use of the health insurance fund remain limited.
- Provincial disparities in medical service prices at state facilities are large. Expensive brand-name drugs are prescribed instead of generic drugs. Lab test and diagnosis results are not mutually recognized among health facilities, leading to re-prescription of these services. The above issues contribute to the increase in unnecessary spending on health. Efficiency in use of available resources remains limited.
- There are not yet specific and consistent strategies and roadmaps for reform of provider payments in the context of health system reform.

### **4) Pharmaceuticals and medical equipment**

The Five-year plan set out the following tasks: 1) Ensure adequate essential medicines to serve treatment needs; 2) tightly control drug prices; 3) Strengthen management of drug quality and safe and rational use of drugs; 4) Promote development of herbal medicine and drugs manufactured from medicinal materials; 5) Promote domestic production of medical equipment and devices; 6) Improve infrastructure of health service facilities. Implementation of these tasks is summarized as follows:

### **Achievements and progress**

- The healthcare system basically ensures adequate essential medicines to serve people's need for medical examination and treatment. In 2012 domestically produced drugs covered 234 in 314 active ingredients in the essential medicines list, with 29 pharmacological effects as recommended by WHO; 10 types of vaccines were produced by 6 domestic companies, satisfying 80 per cent of demand.
- New regulations on competitive tendering for drug procurement are being implemented as directed in Joint Circular No. 01/2012/TTLT-BYT-BTC and Circular No. 11/2012/TT-BYT. Drug price controls in which drug procurement with state budget or the health insurance fund would involve a ceiling on the profit margin allowed between import and wholesale prices for 12 active ingredients has been piloted in 9 health facilities since 1 April 2013. Generic drugs have begun to receive attention in competitive tendering for drug procurement. Drug prices are relatively stable and the growth in drug prices is slower than in the overall consumer price index. Prices of 10 types of winning bid drugs in 2013 have fallen from 56 per cent to 34.64 per cent compared to 2012.

- Good practice standards have been implemented. 100 per cent of modern pharmaceutical manufacturers achieve GMP, 100 per cent of drug quality testing laboratories achieve GLP, and 39 per cent of pharmacies achieve GPP standards.
- A national action plan for combating drug resistance for the period 2012–2020 has been issued.
- Legal documents on developing herbal medicines and drugs from medicinal materials continue to be refined. There are over 80 phytopharmaceutical manufacturers and over 300 herbal preparation manufacturers. These manufacturers have achieved a rapid increase in annual revenue. Some 872 wholesalers and retailers have been issued certification (3 were granted GSP certificates and 22 were issued GDP certificates).
- The Ministry of Health has collaborated with the Ministry of Finance to propose measures to implement tax incentive policies for domestic medical equipment manufacturers. Guidelines on legal procedures for manufacturing and sales of medical equipment have been issued. The Circular regulating issuing of circulation licenses and certificates of free sales (CFS) for domestically manufactured medical equipment have been refined.
- The State has invested in building and renovating 757 health facilities using revenues from government bond sales through Project 47 and Project 930. Up till December 2012, 235 hospitals, 46 clinics and 30 national and provincial hospitals were completed and put into use.
- All hazardous solid medical waste and 94.4 per cent of medical sewage in central hospitals, 98.6 per cent of hazardous solid medical waste and 61.5 per cent of medical sewage in institutes and training facilities at the central level, and 92.4 per cent of hazardous solid medical waste and 66.6 per cent of medical sewage in health facilities in 63 provinces are being treated.

### **Difficulties and shortcomings**

- Domestic drug manufacturing capacity remains limited. Pharmaceutical ingredients are mainly imported. The proportion of domestically produced drugs is low, accounting for only 47 per cent, compared to the hard-to-reach target of 60 per cent. There is still heavy dependence on imports for ARV.
- Access to drugs in remote, mountainous and maritime areas remains limited.
- Drug prices have not yet been adequately controlled. Competitive tendering for drug procurement (Circular 01/2012/TTLT-BYT-BTC) is still insufficient due to imbalance between drug prices and drug quality. The gap between generic drug prices and international reference prices for the same drugs is large. The winning bid price for the same drug varies across hospitals. A model of national competitive tendering for drug procurement has not yet been developed.
- The drug quality monitoring system remains weak. Compliance with rules and regulations on drug prescription among medical staff is not high. Measures for strengthening rational use of drugs have not been uniformly implemented and regularly assessed, leading to slow progress. Sales of drugs without a doctor's prescription are still common. Prescription of antibiotics and drug overuse remain common problems.

- Management of the origin and quality of traditional and herbal medicines faces some difficulties and does not yet meet requirements.
- There are not yet adequate mechanisms and policies to encourage domestic manufacturing of medical equipment and use of domestically manufactured medical equipment.
- Capital investment in construction and improvement of infrastructure and installation of medical equipment in health facilities at the district and provincial level are insufficient.

## **5) Health information system**

The Five-year plan set out the following tasks: 1) Complete the set of policies and plans for development of health information systems by 2015 with a vision to 2020; 2) Complete a system of health indicators, registers and health statistics reports; issue a decision on the health indicator system to standardize the system of basic health indicators; 3) Issue official statistical reporting forms for private health facilities; 4) Strengthen ability to meet needs of information and data users; 5) Strengthen the ability to meet needs of information and data users; 6) Strengthen health information dissemination through diverse and appropriate forms; 7) Gradually modernize and apply information technology to the health information system. Implementation of these tasks is summarized as follows:

### **Achievements and progress**

- The Ministry of Health has set up the Health Information Administration, Health Statistics Division under the Department of Planning and Finance, the Data Integration Center, and Center for Medical Information Technology Application. A directive on strengthening health statistics information and communication has been issued and the Department of Planning and Finance is the sole focal point for issuing official statistical forms for each level. The Ministry of Health is also developing a master plan for the information system and for the health information system (expected to be implemented in 2013).
- The Ministry of Health and development partners are reviewing and updating important indicators to improve the system of basic indicators for the provincial, district and commune level, with the objective of reducing the overload of statistical forms at the grassroots level.
- The Government has approved some health surveys, creating conditions for increasing state budget for the health information system
- The health sector has compiled some important statistical products such as the Health Statistics Yearbook, general health reports, reports on implementation of the MDGs, and special reports on nutrition, communicable disease, and national health accounts. Dissemination of health information continues to be strengthened in diverse forms. The Ministry of Health is developing and standardizing training materials for health statistics staff.
- The health information system of Vietnam has published health data and information on websites of WHO and some other international organizations.
- Monitoring of data collection and reporting has been implemented in some national target programs and in departments and administrations under the Ministry of Health.



- The Ministry of Health has issued regulations on accreditation of information technology application projects in the health sector. Some specialized software have been applied such as hospital management software, HIV/AIDS management software, tuberculosis management and malaria management software. The websites of the Ministry of Health and of other health sector governance units have gradually improved. The Ministry of Health is developing and piloting a system for issuing certificates and licensing online.

### **Difficulties and shortcomings**

- The plan for development of the health information system by 2020 with a vision to 2030 is incomplete.
- There is not yet a data dissemination regulation in place. Information remains inadequate and untimely. Information on private health facilities and other sectoral health facilities is inadequate. Surveys assigned by the Government for the health sector have not been carried out due to limited fund mobilization.
- Most statistical indicators are collected through periodic reports, thus data is inaccurate and often unavailable. Some equity indicators that need to be disaggregated by gender, age, and ethnicity are not surveyed or synthesized from administrative records due to lack of funding.
- Human resources for the health information system are too few in quantity, weak in professional competency and unstable at all levels. The health database remains poor and does not include relevant statistics from different sources.
- Lack of funds for investment in infrastructure and capacity building for health information staff cause difficulty for implementation of policies and plans,
- Long delays in disseminating annual health statistics lead to difficulties in utilizing up-to-date health information for planning and monitoring purposes.
- Software packages that are not interoperable are applied in the same unit, causing difficulty in synthesizing information and waste of available resources.
- There are not yet lists of general health indicators, drug coding or technical services. Medical examination and treatment management software is not connected to VSS.

### **6) PHC, preventive medicine, national health target programs, reproductive health and population-family planning services**

The Five-year plan sets out the following tasks: 1) Consolidate and strengthen the preventive medicine system and grassroots health network; 2) Strengthen preventive medicine and effectively implement the projects of the national health target programs; 3) Complete the system of policies, consolidate the network and implement effectively the activities in the area of population-family planning and reproductive health. Implementation of these tasks is summarized as follows:

### **Achievements and progress**

- The organizational structure of preventive medicine has been stabilized. The health system is focusing on strengthening the health network in island and coastal areas through implementing the project for population control and the project for health development for islands and coastal areas.

- The preventive medicine system has basically maintained achievements or exceeded targets for disease control compared to previous years. Major outbreaks have been kept under control. The immunization rate remains high and achievements in eradication of polio, neonatal tetanus, and measles have been maintained due to implementation of the expanded immunization project. The program for tuberculosis prevention and control covers 100 per cent of the population and has reduced the tuberculosis prevalence to 225 per 100 000 population in 2011. Over 90 per cent of approximately 100 000 newly detected tuberculosis cases have been cured. The number of cases and deaths from HIV /AIDS has gradually been falling over time.
- The program for prevention and control of non-communicable diseases is expanding in terms of coverage, screened subjects and treatment management.
- Some 50 national technical standards for food safety have been issued. An interdisciplinary steering committee has been set up to work on food safety. Food safety testing centers have been developed and upgraded. The number of poisoning cases has fallen and is under control.
- Vietnam has made much progress towards achieving reproductive health-related MDGS over the years, and continues to see progress in the past year in relation to targets. The number of antenatal and neonatal screenings exceeded plan targets in 2012. The number of new contraceptive users reached 100 per cent of the planned target. Maternal health and antenatal care achieved and exceeded the targets in 2012. The malnutrition rate of children under age 5 (underweight) was estimated at 16.2 per cent, down 0.6 percentage points compared to 2011, exceeding the target set by the National Assembly.
- The Ministry of Health is finalizing and submitting 5 minimum medical intervention packages for maternal and child health for approval.

### **Difficulties and shortcomings**

- There are not yet incentives to attract health workers to the field of preventive medicine. There is no linkage between preventive medicine and medical treatment, hindering continuity and comprehensiveness of health care. Investment in funding and facilities for preventive medicine are limited and has not kept up with demand. The medical information system remains weak and lacks uniformity, consistency, collaboration and effectiveness in planning.
- The management of the national target programs is vertical, without collaboration in management, direction and implementation of the programs. Intersectoral collaboration remains limited.
- Some diseases such as tuberculosis, dengue fever, hand-foot-mouth diseases have not been well controlled. The non-communicable disease prevention and control programs have not achieved the targets set in the plan, including targets for screening, detection, and management of patients at PHC facilities, targets for development of a preventive medicine network, and targets for health worker training. Achievements in food safety and hygiene lack sustainability, especially in attainment of food safety and hygiene targets and food poisoning control.
- The contraceptive prevalence rate reached 76.2 per cent, down 2 percentage points compared to 2011. The crude birth rate increased 0.3 births per 1000 population, from 16.6‰ in 2011 to 16.9‰ in 2012 (year of the Dragon) [55], thus the goal of reducing fertility by 0.1 births per 1000 population was not achieved. The population growth

rate was higher and the population size was larger than the set target. Sex ratio at birth continued to increase. Some indicators for population and family planning and reproductive health care have not been well controlled in some areas, including fertility control and supply of contraceptive methods in mountainous, border and maritime areas.

- Socio-economic inequalities continue to persist in MMRs, adolescent birth rates, contraceptive prevalence rate and unmet need for family planning, percentage of births attended by trained health personnel and antenatal coverage.

## **7) Medical service delivery**

The Five-year set out the following tasks: 1) Reduce hospital overcrowding; 2) Improve medical care service quality; 3) Complete the organizational structure at all levels of health care; effectively organize master plan development for medical services; 4) Complete the system of legal regulations for implementing the Law on Examination and Treatment. Implementation of these tasks is summarized as follows:

### **Achievements and progress**

- The Prime Minister has approved the project for reducing hospital overcrowding for the period 2013–2020, the satellite hospital project and the Family Medicine project. In 2012 there was an increase of 14 269 planned and 14 918 actual beds nationally. An increase of 1.4 beds per 10 000 people compared to 2011. The number of treatment days and the average bed occupancy rate in hospitals decreased slightly, even at the central level.
- The Ministry of Health issued Directive No. 05/CT-BYT in 2012 on improving the quality of medical services. Circulars guiding management of medical service quality and laboratory testing quality have also been promulgated. Teaching staff for management of medical laboratory testing quality are being trained.
- A master plan for the hospital network is being implemented according to Prime Ministerial Decision 30/2008/QĐ-TTg. The Ministry of Health is finalizing a master plan for development of the health sector.
- Some projects for upgrading medical equipment and facilities are being implemented, mainly at the grassroots level. The project for reducing hospital overcrowding has focused on investing in and upgrading commune health stations that achieve the national benchmarks (now also referred to as the national criteria). This project is linked with the national target program on Building a New Countryside. Measures to strengthen capacity of health workers have also been implemented (see Chapter I, Section 2).
- In 2012, five new private hospitals were licensed and 45 415 practice certificates were issued (covering over 50 per cent of the practitioners requiring certification). Nearly 3000 operating licenses were granted, achieving 16 per cent of the planned target for 2012. The Ministry of Health issued professional standards for medical examination and treatment, drugs, and medical laboratory testing. Regulations on procedures for medical examination and treatment and referrals are being developed. The Ministry of Health has updated and supplemented more than 1000 medical procedures and is accrediting 2000 technical procedures. Hundreds of clinical procedures at the commune level have been developed and piloted in three provinces in 2013.

### **Difficulties and shortcomings**

- Outpatient and inpatient visits are increasing rapidly. The bed occupancy rate at the central level remains high, particularly in oncology, pediatrics, cardiology, gynecology, and endocrinology specialties. There are not yet specified guidelines on providing high quality medical service for those who can afford to pay. Legal documents regulating referrals have not been issued. There are not yet adequate conditions to ensure the quality of services at lower levels (e.g., human resources, medical equipment, and infrastructure).
- Policies on quality accreditation for medical examination and treatment services have not been implemented.
- Regulations on the functions and responsibilities of the district health facilities have some limitations.
- There is not yet a regulation on partial or overall suspension and revocation of operating licenses and practice certificates. Technical standards for medical examination and treatment facilities have not been issued. Human resources for issuing practice certificates and operating licenses are limited. Licenses and certificates are issued once for a lifetime and on the basis of application dossiers rather than on the basis of qualifications and practical skill examinations, and without a linkage with continuing medical education. The progress of licensing and certification is slow. The database system for registration and management of licensing and certification is being piloted nationwide.
- Many technical services and guidelines on medical treatment have not been updated. There is not yet a mechanism for assigning the task of maintaining and updating the large number of technical procedures and guidelines to professional medical associations.
- Hospital regulations were promulgated in 1997 and largely replaced by circulars and new guidelines, so there is a need to consolidate these updates and amendments and make further adjustments.
- There are not yet adequate evidence-based criteria and standards for quality and efficiency of services. There is also not yet a preventive monitoring system. Some monitoring and evaluation indicators lack routine information sources.

### **1.3. Status of implementing targets of the Five-year plan 2011–2015**

The Five-year plan of the health sector set out 19 health indicators that are disaggregated into three main groups. Data analysis shows that in the period 2010–2012, four of six indicators in the input group achieved or exceeded the planned target for 2012. Specifically, the number of doctors per 10 000 population increased from 7.33 to 7.46 while the planned target for 2012 was 7.4. The number of pharmacists with university education was 1.92 per 10 000 people in 2011 while the planned target was for 2012 was 1.4. The proportion of communes with medical doctors reached 76 per cent while the planned target for 2012 was 74 per cent. The ratio of actual beds to 10 000 people (excluding commune health stations) was 24.3 while the planned target was 21.5. Two indicators in this group show non-achievement of the targets, including the proportion of villages served by health workers and the proportion of communes with obstetrics–pediatrics assistant doctor or midwives.

Two of three operating indicators have exceeded the planned target and one indicator has not been assessed due to an adjustment to its definition. It is noteworthy that the proportion of infants who were fully immunized with 7 types of vaccine in 2010 and 8 types of vaccines in 2011 and 2012 was above the planned target for each year. The new national benchmarks for commune health with higher requirements have been applied since 2013; however, information about achieving these benchmarks remains inadequate. As a result, assessment of achievement of the planned target on the basis of these benchmarks has not been performed. The proportion of the population enrolled in health insurance increased by 1.8 percentage points to 66.8 per cent and exceeded the 2012 target of 66 per cent. It should be noted that the 2015 target for health insurance coverage has been adjusted downward by the Government from 80 per cent to 70 per cent for 2015.

Two out of ten output indicators achieved the target planned for 2012, including HIV/AIDS prevalence, falling to 0.24 per cent, (the target was below 0.3 per cent), and the malnutrition rate of children under age 5 (underweight) fell to 16.2 per cent (the target was 16.6 per cent). Some indicators did not achieve the target. Specifically, the IMR at 0.1 deaths per 1000 live births and under five mortality rate at 0.2 deaths per 1000 live births both remained higher than the 2012 target. Average life expectancy in 2012 was 73 years, lower than the planned targets for 2011 and 2012. The sex ratio at birth in 2012 increased to 112.3, thus not achieving the target to remain below 112 in 2012. In 2012 the crude birth rate rose 0.3‰ [55] thus not achieving the target of reducing fertility by 0.1 ‰. The population growth rate of 1.06 per cent was too high compared to the planned target of 0.99 per cent, and the population reached 88.77 million people, an excess of 100 000 people compared to the planned target of 88.67 million people. There is not yet adequate data to assess recent progress in reducing maternal mortality per 100 000 live births. This figure was estimated at 69 deaths per 100 000 live births in 2009 while the planned target for 2012 was 66 maternal deaths per 100 000 live births.

#### 1.4. Implementation of the Millennium Development Goals in Vietnam

Vietnam has made significant progress in implementing the MDGs for health.

**MDG 1:** In 2012, the malnutrition rate (underweight) of children under age 5 decreased from 41 per cent in 1990 to 16.2 per cent, a decrease of more than 60 per cent, exceeding the goal of halving malnutrition 2015. However, in some regions such as the Central Highlands, the malnutrition rate remains high at 25 per cent in late 2012 while the target set in the plan for 2015 is 23.5 per cent for this region.

**MDG 4:** The IMR dropped to 15.4 per 1000 live births in 2012, however, the rate of decline has slowed, achieving only a 0.1 per thousand decline per year in 2011 and 2012. A further decline in the IMR by 0.6 per thousand by 2015 to meet the MDG is likely. Although impressive results were achieved in reducing the U5MR from 58‰ in 1990 to 23.2‰ in 2012, reducing this rate by another 3.9 per thousand live births reach the MDG by 2015 will be hard to achieve if the rate of decline remains unchanged at 0.4 per 1000 live births per year.

The figures of the Ministry of Health show that the target of over 90 per cent of infants vaccinated against measles was achieved. This rate increased from 55 per cent in 1990 to 95.6 per cent in 2008, and has been maintained at over 95 per cent through 2012. However, according to data in MICS 2011, only 84 per cent of infants were vaccinated against measles. This suggests that Vietnam either has not achieved the MDG or needs to strengthen record keeping and raising maternal awareness of vaccination.



**MDG 5:** The MMR per 100 000 live births has decreased significantly, from 233 deaths in 1990 to 69 deaths in 2009. Assessment of this indicator is hard to implement regularly due to a lack of updated and reliable data. Reducing deaths from 69 in 2009 to 58.3 by 2015 is not achievable unless breakthrough efforts are made. The proportion of women who received antenatal care consisting of three visits reached 87.7 per cent in 2009. Since 2010 this indicator has been replaced by the proportion of women who received antenatal care consisting of at least 3 visits, one in each of the trimester of pregnancy and in 2012 this indicator reached 89.4 per cent. The proportion of women giving birth who were assisted by a medical worker has been maintained at an average of 97 per cent since 2010. However, according to the MICS survey, this proportion only reached 92.9 per cent [56].

**MDG 6A:** Vietnam has controlled HIV prevalence at less than 0.3 per cent of the population. The number of new HIV infections reached a peak of 30 846 in 2007. However, the number of annual new infections has seen a declining trend since 2008. It was estimated that there were 11 102 new cases of HIV infection in the first 11 months of 2012. With regard to the most at risk populations, HIV prevalence among injecting drug users fell to 13.4 per cent in 2011. However, the rate of HIV infection among men who have sex with men (MSM) is estimated to have increased. The target of 80 per cent of people using condom in the latest high-risk sexual relation is reachable if the current achievements are maintained.

**MDG 6B:** Up till September 2012, the number of people living with HIV and being treated with ARV increased 26 times compared to the end of 2005. This means that the ARV need of 68.3 per cent of adult patients and 81.3 per cent of child patients were met.

**MDG 6C:** Compared to 2000, malaria prevalence declined 49 per cent and mortality from malaria fell by 68 per cent by 2011.

**MDG 6D:** Vietnam needs to strive harder to achieve the MDG for tuberculosis control. The WHO-WPRO goal is to reduce tuberculosis prevalence and mortality by 50 per cent from 2000 to 2015, yet Vietnam has achieved only a 40 per cent reduction in prevalence and 38 percent reduction in mortality rates compared to 2000 [61]. However, according to data from the United Nations, from 1990 to 2011 tuberculosis prevalence in Vietnam decreased only by 20 per cent and deaths from tuberculosis fell by 28 per cent compared to the planned target reduction of 50 per cent by 2015.

**MDG 7:** Vietnam achieved MDG 7 for safe water and basic sanitation. However, 19.5 million people still do not use a sanitary toilet and 7.1 million people do not yet use a safe drinking water source.

Overall, alongside the considerable achievements towards these goals, there are still challenges to ensuring equity in health care. There are 5 objectives that need to be prioritized at the national level including: (i) access to HIV treatment services, (ii) reduction in maternal mortality and under-five mortality, especially in mountainous and ethnic minority areas, (iii) unmet need for contraception of migrant women, single women, and adolescents in mountainous and disadvantaged areas, (iv) detection and treatment of tuberculosis, and (v) access to better sanitation conditions in mountainous and rural areas. To achieve the goals to which the nation is committed, not only the health sector but also other ministries and sectors, and even the whole society need to strive and collaborate with each other. In addition, the health sector needs to maintain sustainability of achievements after 2015.

This synthesis of health indicators indicates some difficulties and challenges in monitoring implementation of the five MDGs due to inconsistent and even contradictory statistics from official information sources and a lack of reliable data and evidence.



## 2. Towards universal health coverage

UHC is a matter of global concern, and is widely discussed in the forums of many international organizations, including the United Nations. The JAHR 2013 provides an in-depth analysis of this topic with the objective of identifying concepts, objectives, requirements and conditions towards UHC in Vietnam.

According to the United Nations, “universal health coverage implies that all people have access, without discrimination, to nationally determined sets of the needed promotive, preventive, curative and rehabilitative basic health services and essential, safe, affordable, effective and quality medicines, while ensuring that the use of these services does not expose the users to financial hardship, with a special emphasis on the poor, vulnerable and marginalized segments of the population”.

UHC consists of three goals including: *Equity in access to health care service*, implying that all people seeking medical care have access to health services without discrimination and regardless of their ability to pay; *Provision of quality and comprehensive medical services*, including services for health promotion, preventive and curative care, rehabilitation and palliative care; and *protection against financial risks* ensuring that medical service costs do not drive medical service users, especially the poor and the disadvantaged, into poverty.

The objective of UHC is not limited to providing a fixed minimum service package [66], but rather a continuously developing process without a ‘completion’ point [67].

On the basis of the three main goals of UHC, the report analyzes two issues in Vietnam including the current situation of (i) healthcare service coverage and (ii) financial protection in health care, identifies priority issues and makes recommendations for measures to strive towards UHC.

### 2.1. Healthcare service coverage

#### 2.1.1. Coverage of preventive medicine, PHC, reproductive health and population-family planning services

##### Achievements and progress

The organization of the provincial preventive medicine network in most localities has been stabilized. Provincial preventive medicine centers and district health centers have been set up to perform preventive medicine functions and management of commune health stations. In 2013, the project for health development in island and coastal areas was approved by the Government. This project aims at strengthening the capacity of the health network and developing health manpower in both quantity and quality to provide health services, emergency care and emergency medical transport in island and coastal areas. The national target programs continue to receive financial investment from the state budget.

*Prevention and control of communicable diseases:* The health sector has kept dangerous communicable diseases and major outbreaks under control. The tuberculosis prevention program, HIV/AIDS control program and expanded program on immunization have achieved targets and continue to implement intervention activities.

*Prevention and control of non-communicable diseases:* Apart from the program for prevention and control of diabetes that has been implemented nationwide since 2010 with a network from the central level to commune health stations, other non-communicable disease

prevention programs have not yet been widely implemented and have not achieved the annual targets. Screening and management of patients remain ineffective.

*The national target program for food safety* has reduced incidents and cases of food poisoning each year. An intersectoral Steering Committee on food hygiene and safety has been set up in each province. There are 25 food safety testing laboratories achieving ISO/IEC 17025:2005 standard and 50 national technical standards for food safety have been developed. A system of quality accreditation has been set up in 2 units responsible for testing of food safety and hygiene.

*Population-family planning, reproductive health care and child nutrition:* Population-family planning and reproductive health care services are available in most localities and have reached and exceeded the plan targets. Among these services are antenatal screening, newborn screening and provision of contraception methods for new users. Reproductive health care projects have also achieved and exceeded basic targets for the proportion of women who receive antenatal care consisting of at least 3 visits in each of the trimesters of pregnancy and postnatal care at home, as well as targets for the proportion women giving birth who received the assistance of trained attendants and abortion rates. Child nutrition programs have exceeded the targets set in the plan for 2012, specifically the target for the malnutrition (underweight) rate among children under age five. In remote and ethnic villages, more than 1200 village-based ethnic minority midwives have been trained and their work is being institutionalized into the health system.

*Other interventions for health promotion:* The Tobacco Control Law has been approved by the National Assembly and has come into effect. The Ministry of Health is drafting sublegal documents stipulating guidance for implementing some articles such as smoking addiction counseling and sanctions for violations of the Law. Currently, the Ministry of Health is drafting the Law on alcohol abuse control.

*Health environmental management and occupational health:* Many programs and projects have been implemented, including a master project for medical waste treatment for the period 2011–2015 with orientation to 2020, advocacy of the patriotic sanitation campaign to improve the people's health, the national target program on rural water and sanitation, the national program on occupational hygiene and safety, prevention and control of occupational disease, and guidelines on licensing transportation of dangerous goods such as insecticides that are used for household and medical purposes.

### **Difficulties and shortcomings**

The organizational structure of the grassroots health system (district and commune levels), medical units under the provincial preventive medicine centers and PHC in general is fragmented and lacks coordination for management and direction of preventive and PHC service delivery.

There are not yet effective linkages or integration in management and provision of services in the various health programs, between various preventive medicine centers, between preventive and curative facilities, or among levels of the health system.

There is not yet a mechanism for managing referrals. Financial mechanisms at the district and commune level remain inappropriate and do not encourage health facilities to provide services effectively.

Resources for investing in infrastructure and medical equipment, and funds for regular operation of preventive medicine and PHC facilities are inadequate. There is a shortage of

health human resources both in quantity and professional competencies while policies to attract health workers to the grassroots level and disadvantaged areas remain inappropriate.

The information system for monitoring and supervising communicable and non-communicable diseases and epidemics remains inconsistent and is not yet computerized. In particular, there is not yet a database system or an information processing and management system for monitoring and surveillance of diseases and risk factors.

Reductions in donor support for the population and family planning program will lead to shortfalls if substantial financial investment from the Government budget is not forthcoming. Vulnerable groups, ethnic minorities, people living with disabilities or with HIV/AIDS, especially young and unmarried people, have high unmet demand for reproductive health care, yet they have received little attention in Government reproductive health policies.

## **2.1.2. Coverage of medical examination and treatment and rehabilitation services**

### **Achievements and progress**

*The health care network continues to expand in both public and private sectors.* Through the end of 2012, there were a total of 1180 hospitals, with 25.04 beds per 10 000 people (excluding commune health stations, including planned beds in public hospitals and private hospital beds). Most districts have general hospitals or regional polyclinics providing primary care services. Provincial general and specialized hospitals are concentrated in provincial centers. There are currently 150 private hospitals licensed, with 9611 beds.

*Medical examination and treatment services have increased significantly.* In 2012 there were nearly 132 million hospital visits, an increase of 6.8 per cent compared to 2011. The highest growth was in the private hospital sector, with an increase of 19.1 per cent over 2011.

*Service availability of the grassroots health network continues to improve.* Some 145 district hospitals and 46 regional general clinics have been built or renovated and put into operation through implementation of Project 225 and Project 47 raising revenues through government bond sales. The number of district hospitals has increased by 17 per cent and the number of beds in district hospitals has increased by 64 per cent over a 10 year period.

*Use of health services at the grassroots levels, especially in the district general hospitals has increased significantly.* The proportion of patients receiving outpatient care services increased from 11.9 per cent in 2004 to 17.6 per cent in 2010, while the share receiving inpatient care increased from 35.4 per cent to 38.2 per cent. Inpatient visits increased by 1.5 times while outpatient visits increased by 3 times over a 10 year period. The proportion of women receiving antenatal care increased from 81.65 per cent to 100 per cent. In 2012, district hospital beds accounted for only 30.5 per cent of all hospital beds, while medical examinations at this level accounted for 45 per cent of the total.

The assigned task of the Family Medicine project is to set up family doctor clinics that are integrated with existing health facilities to strengthen capacity for management and provision of comprehensive and continuous health services for individuals and households. In the immediate future from 2013 to 2015, a network of family doctor clinics will be piloted in Hanoi, Ho Chi Minh City and in some selected provinces.

A network of nursing-rehabilitation hospitals has been set up in most provinces. The community-based rehabilitation program was initiated in 1987 and up to now has been widely scaled up in 51 provinces, 337 districts and 4604 communes. From 1987 to 2010, this

program investigated, detected and facilitated health management for more than 170 000 people with disabilities, and implemented rehabilitation therapy for 23.2 per cent of those in need and 44.7 per cent of people with disabilities.

Improvements in continuity of care have shown encouraging results, especially in some national target health programs such as tuberculosis and HIV prevention and control program.

The traditional medicine field is implementing Prime Ministerial Decision No. 2166/QĐ-TTg (2010) that issued the Government Action Plan on development of Vietnamese traditional medicine to the year 2020. Currently there are 58 traditional medicine hospitals nationwide. All provincial general hospitals and 90 per cent of district hospitals have a preventive medicine department or division. 85 per cent of commune health stations provide traditional medicine services. The system of private traditional medicine, including three private hospitals and more than 10 000 traditional medicine clinics provide examination and treatment for approximately 2000 patients per year on average. Traditional medicine as a share of total medical examination and treatment consultations has increased significantly, accounting for 8.8 per cent at the provincial level, 9.1 per cent at the district level and 24.6 per cent at the commune level.

### **Difficulties and shortcomings**

Disease patterns are changing rapidly while the delivery network of medical examination and treatment services does not keep up with demand, especially the service delivery network for non-communicable diseases, injuries and accidents.

Overcrowding in tertiary hospitals has shown no significant improvement. Bed occupancy rates in central hospitals under the Ministry of Health remain high, at an average of 112.5 per cent in 2012. Overcrowding in some other hospitals is still high, with the bed occupancy rate of over 120 per cent.

*The capacity of lower levels remains limited.* Many district hospitals do not have capacity to apply medical techniques that are considered appropriate for their level of care. This is mainly due to a shortage of health workers with relevant professional competencies. Demand for service delivery and management of non-communicable diseases has increased, yet the grassroots health facilities do not meet requirements for professional competencies, drugs and other conditions.

The organizational structure and management mechanisms of the grassroots health network have changed constantly during the period 1999–2008, creating instability in the organizational structure and a disturbance in both health human resources and capacity to provide services. Regulations on the functions of health facilities at the district level are still insufficient, hindering the implementation of professional tasks.

Management of private health care facilities faces difficulty. Foreign doctors practicing illegally have been detected in some clinics. Joint ventures and business partnership between state and private hospitals have facilitated technical development and provision of medical services, but have brought about overprovision of diagnostic and therapeutic interventions for rapid economic returns on investments.

A rehabilitation hospital network has been set up but only a few rehabilitation hospitals fully perform their functions and tasks. Investment in rehabilitation is still very limited. Some health problems are arising, such as autism in children, but inadequate attention and investment are given.

A traditional medicine network has also been set up and developed, yet does not achieve goals set out in the national policies on traditional medicine.

Healthcare service quality does not meet requirements. Most hospitals do not have quality systems in place. The technical guidelines system remains weak and is not regularly updated. Issuing once-in-a-lifetime practice certificates without linkage with practical skill examinations and continuing medical education affects the quality of health worker resources.

Financial autonomy under Decree 43 and other decrees on restructuring the district health system has affected continuity of care.

Referrals for patients, especially for the insured patients, face difficulty due to a lack of specified regulations and patients' trust in professional competencies of lower levels. Referrals back to lower levels remains weak and lack feedback from higher levels. Some projects for prevention of non-communicable diseases have been implemented on a narrow scale in some selected provinces due to limited resources, especially for projects for prevention of cancer, hypertension, diabetes, and COPD and projects for mental illness management.

In remote and mountainous regions, many people still do not utilize services provided by health facilities, especially commune health stations and outreach services receive little support. With changes in population structure and demographic, need for reproductive health services has increased, especially for contraception and safe motherhood services among young, unmarried and migrant people. Refresher training for health workers at the grassroots level is not regularly provided due to shortage of budget allocated for this activity

### **2.1.3. Access to essential medicines**

Access to quality essential medicines and rational use of drugs is the major objective of the National Drug Policy of Vietnam and is also one of the necessary conditions to ensure the implementation of UHC.

#### **Achievements and progress**

The drug supply network, especially essential medicines in Vietnam, has extensive coverage and is easily accessible with relatively high availability of essential medicines in health facilities and in the community.

Only residents of border, island and remote areas have limited access to essential medicines. The Government has issued policies and measures to support access to drugs for disadvantaged groups and ensure adequate drugs for health programs.

The Government has also promulgated many policies to strengthen control of drug prices towards integrating measures and strengthening transparency in drug registration, drug sales, drug supply and competitive tendering for procurement of drugs in order to increase accessibility and reduce financial burden for people.

#### **Difficulties and shortcomings**

Nevertheless, drug prices remain high, especially brand-name drug prices, and pharmaceutical spending accounts for a large share of total societal health spending, which is an important cause of rising household out-of-pocket health spending.

In addition, irrational drug use, such as a high share of prescriptions containing antibiotics and a low share containing essential medicines or generic drugs, are also factors



leading to an increase in drug spending, hindering access to drugs and reducing financial protection for pharmaceutical users.

Strengthening access to drugs for residents of disadvantaged areas and for disadvantaged groups, promoting drug price control policies in drug circulation and distribution, and promoting rational use of drug are priority issues to implement UHC in the field of pharmaceuticals.

## **2.2. Financial protection in health care**

### **2.2.1. Reducing household out-of-pocket spending on health**

The household out-of-pocket spending share of total health spending in Vietnam is much higher than the WHO recommended 30–40 per cent. It accounts for from 8.3 to 11.0 per cent of household capacity to pay and for approximately 4.6 to 6.0 per cent of total household expenditure. Although a downward trend has been seen in recent years, household out-of-pocket spending on health still remains high.

The proportion of households in Vietnam suffering from catastrophic health expenditure in 2002 was 4.7 per cent, rising to above 5 per cent from 2004–2008, then falling to 3.9 per cent in 2010. The absolute number of households facing catastrophic spending in Vietnam increased from 811 499 in 2002 to over 1 million from 2004–2008, then down to 862 661 in 2010. The proportion and number of households in Vietnam facing impoverishment due to health care spending was around 3.4 per cent in 2002 (590 446 households) and remained high until 2010 when it fell to 2.5 per cent (563 785 households). The proportion of households facing catastrophic spending and impoverishment due to health spending in Vietnam is relatively high compared to other countries in the region. Households with at least one member insured, households in urban areas and households with higher living standard have higher out-of-pocket spending on health. Catastrophic spending and impoverishment due to health spending are higher among households with no members insured, households living in rural areas and the poor.

The out-of-pocket share of total health expenditure of society and the proportion of households facing catastrophic spending or impoverishment due to health spending in Vietnam in 2010 decreased compared to previous years. Analysis shows that the health insurance share of total health spending and the use of insured services have increased over time. These encouraging results can be attributed to recent social and health policies, especially the health care policy for the poor and children under age six, subsidies for medical services for social assistance beneficiaries, and most recently, the Law on Health Insurance. However, the out-of-pocket share of total health expenditure and the proportion of households facing catastrophic spending and impoverishment due to health spending are still high compared with other countries in the region and in the world. Vulnerable groups including households without health insurance, households living in rural areas or having lower living standard have a higher proportion facing catastrophic spending or impoverishment due to health spending, which is a challenge for Vietnam in achieving UHC.

### **2.2.2. Financial protection for disadvantaged and vulnerable groups**

Since 1995, a number of legal documents have adjusted and expanding rights and coverage of medical services for disadvantaged and vulnerable groups including the poor, near poor, ethnic minorities living in disadvantaged areas, children under age six, the elderly, people with disabilities and rural-urban migrants. The Law on Health Insurance (2008) stipulated that state subsidized health insurance cards are to be issued to the poor, ethnic



minorities living in disadvantaged areas and children under age six and a 50 per cent premium subsidy granted to the near poor who enrolled in health insurance. In 2012, the Government issued Decision No. 14/2012/QĐ-TTg supplementing the list of beneficiaries of medical care subsidies. In addition to coverage of treatment costs, patients are to be provided subsidies for transport and food costs. The Government issued Decision No. 14/2012/QĐ-TTg increasing the minimum subsidy for the insurance premium from 50 per cent to 70 per cent in the year 2012. The Law on the Elderly issued in 2009 stipulates priority for medical examination and treatment to be given to the elderly and encourages organizations and individuals to provide free health care service for this group. Regular medical checkups for the elderly are to be paid from the state budget.

*Some important progress:* The financial subsidy policies mentioned above have contributed to implementation of an important orientation for reform of health financing mechanisms – a gradual shift from supply-side subsidies for recurrent expenditures of health care facilities towards demand-side subsidies for health service users through state budget subsidies to pay health insurance premiums. Funds allocated from the state budget for health care for the poor and children under age six have increased over time in terms of the per capita contribution amount, total spending and spending on medical services. Health insurance coverage for the poor is almost universal. This has significantly reduced out-of-pocket health spending of the poor. The age at which the elderly can receive allowances has been reduced from 90 to 80 years. Health care funds for the poor and financial policies to support PHC for the elderly have facilitated access to health services for the elderly, particularly the poor elderly living in rural areas, to increase access to health services without increasing spending on health care. According to estimates of the Ministry of Labor, Invalids and Social Affairs, 50.4 per cent of households with disabled members have benefited from health support policies, nearly 40 per cent of these have been provided free medical check-up and 45.4 per cent have been issued with health insurance cards.

### **Difficulties and shortcomings**

Although the State has issued policies to subsidize health insurance coverage, , health insurance enrollments of the near poor have barely exceeded 25 per cent. Only some, not all members of near poor households enroll in health insurance. The share of the premium the near poor have to cover is relatively high (at 30 per cent). This high premium, combined with 20 per cent co-payment and no stop loss provision to limit cumulative co-payments in a year reduce the significance of health insurance for protecting the insured from financial hardship due to health spending. Frequency of health care services use among the poor remains low, thus, only 75 per cent of the health insurance fund contributed for this group is actually used to reimburse facilities, and in some localities, it falls as low as 40–60 per cent. Issuing health insurance cards for children under age six and the elderly aged 80 and older has been slow. In 2011, about 19.7 per cent of children under age six were not issued health insurance cards, especially ethnic minority children and children with temporary residence. Implementation of the Law on the Elderly and policies on health care for the elderly still face difficulty, especially in rural areas. Approximately 50 per cent of people with disabilities have some difficulties in accessing health services. High medical treatment costs, lack of appropriate means of transportation, geographic distance, bureaucracy, lack of appropriate services and discrimination are the main causes of limited access. Migrants often have to pay more for health services because many of them are not enrolled in health insurance. In general, supervision, monitoring, and evaluation of impact of policies on financial protection for the poor and disadvantaged are not implemented in a systematic way.

### **2.2.3. Development of universal health insurance**

#### **Achievements and progress**

In 2011, 57.08 million people were enrolled in health insurance, accounting for 65.0 per cent of the population. In 2012, about 59.31 million people were insured, accounting for 66.8 per cent of the population [18]. Health insurance coverage in some mountainous provinces, with a large number of poor and ethnic minority households, can reach over 75 per cent. Health insurance has become an important financial resource for health care. In 2012, the health insurance fund spent approximately 33 419 billion (1.7 billion USD) on medical service reimbursements.

The Government has approved the project for implementation of the roadmap towards universal health insurance, striving to achieve health insurance coverage of at least 70 per cent of the population by 2015. The State has continuously increased its contribution to subsidize the health insurance for the poor, the near poor and other beneficiaries of social policies. Health insurance covers a large number of medical services, from medical examination and treatment to rehabilitation services at all levels.

#### **Difficulties and shortcomings**

Health insurance coverage in the formal employment sector remains low due to a lack of measures to enforce compliance with regulations on compulsory health insurance. Health insurance coverage in the informal sector is low because state budget support is insufficient to compensate for the people's low ability to pay. In addition, health insurance coverage has been implemented through individual rather household coverage. State management of commercial health insurance remains limited.

Essential measures to ensure safety, effectiveness and quality in selection of drugs, medical services and medical supplies have not been issued. Health technology assessment has not yet been implemented, thus selection of drugs, technical services and medical supplies is still largely based on hospital proposals rather than on evidence of cost effectiveness, while provider payments are still mainly fee-for-service.

Even when insured, some people still have to pay for services that exceed their ability to pay and thus face risk of impoverishment. The main causes are co-payment without stop loss provisions, out-of-pocket payments for many services and drugs that are excluded from the insured list of drugs, out-of-pocket payments for technical services that are in the list of high tech services not fully covered by insurance, out-of-pocket payment for expensive drugs and services that are not selected based on evidence of cost-effectiveness, and fee-for-service provider payments applied in the context of hospital financial autonomy.

### **2.2.4. Mobilization of funds for implementation of universal health care**

#### **Achievements and progress**

Total health care expenditure per capita in Vietnam exceeds the minimum amount WHO recommends for low income countries to be able to implement the MDGs and ensure access to essential medical services. However, the household out-of-pocket spending share of total health expenditure remains above 50 per cent and state budget spending on health only accounted for 26 per cent of total health expenditures in 2010. State budget spending on health out of total state budget recurrent expenditure increased continuously from 2008 to 2012, reaching 8.3 per cent. State budget health expenditures as a share of GDP reached 1.97 per cent in 2011.

Analysis of demand for and ability to satisfy financial requirements for implementation of universal health insurance coverage shows that to achieve health insurance coverage of 70 per cent in the year 2015, state budget spending on health needs to increase to 0.6–0.7 per cent of GDP following the roadmap of the government and to 0.7–1.6 per cent of GDP if health insurance is to be expanded in terms of both population and service coverage. Forecasts of economic growth lead to estimates of an additional amount of state budget resources for health equivalent to 0.4 per cent of GDP by 2015. This suggests that it would be difficult to meet financial requirements to implement the roadmap for health insurance coverage of 70 per cent in 2015 by relying only on state budget spending. Strategies for mobilizing other financial resources and for increasing efficiency in use of available resources need to be implemented.

Health insurance is an important financial resource for implementing strategies for universal health care coverage. However, although population coverage reached 60.3 per cent in 2010, health insurance payments to providers accounted for only 18 per cent of total health expenditure. This is because the health insurance fund does not cover preventive medicine, self-medication, expensive services in private health care facilities and co-payment for the compulsorily insured. Expanding health insurance coverage further faces severe difficulties. The near poor and the voluntarily insured have the lowest insurance coverage, with 25 per cent and 26 per cent respectively. Compared with the maximum premium of 6 per cent as specified in the Law on Health Insurance, the existing premium of 4.5 per cent could potentially be increased. However, increasing the health insurance premium rate is considered infeasible in the current situation.

The external assistance share of health spending is not high, at approximately 2.3 per cent of total health expenditure according to the National Health Accounts 2009. Nevertheless it still plays an important role. External assistance provides financial support and technical assistance for addressing difficulties in expanding health insurance coverage of population and services, including, for example, subsidies for non-medical costs incurred by the poor when seeking care, subsidies for enrolling the near poor in health insurance and technical support for provider payment reforms.

To strengthen financial resources for implementation of UHC, financing innovations to mobilize funds for health care activities are needed. So far only revenues from the lottery have been mobilized for health care activities nationwide. In 2011, this mobilized financial source reached 2154 billion VND, accounting for 7.1 per cent of state budget recurrent expenditure on health. Tobacco control funds being set up under the Tobacco Control Law will also provide an additional source of health financing.

### **Difficulties and shortcomings**

Macroeconomic difficulties affect the ability to increase state budget spending on health in the present context. The growth rate of state budget health spending has begun to slow. State budget as a share of total health spending is less than 10 per cent and has recently experienced a declining trend.

In 2010, funds mobilized through health insurance still account for only a small share of health spending (18 per cent) compared with population covered by insurance (60.3 per cent). Insurance premiums collected from some groups suffer from limited compliance. Expanding health insurance coverage for the remaining groups faces many difficulties.

The external assistance share of total health spending is not high, and is expected to gradually decline in the coming years. Meanwhile, use of external assistance has had low effectiveness as assessed based on disbursement rate of only 51 per cent in 2012.

Implementation of health financing innovations are still weak and have not received adequate attention.

## **2.2.5. Increasing efficiency in use of available resources**

### **Achievements and progress**

If we compare health spending per capita of Vietnam (about 95 USD per person in 2011) with health indicators, it can be said that the *efficiency* of the health system in Vietnam is relatively high compared with many other countries in the world.

With regard to financial allocation, Vietnam has clearly identified priorities for health care aspects that can bring high efficiency, including preventive medicine, the grassroots health network, PHC, maternal and child health care and support for the poor. Data from the National Health Accounts 2009 show that share of state budget spending on preventive medicine and health promotion accounted for 53.7 per cent of total budget spending on health and the share of state budget spending on medical services accounted for only 41.7 per cent. In addition, allocation of state budget prioritizes remote and mountainous areas, with allocation coefficients from 1.7–2.4 times higher than for urban areas.

### **Difficulties and shortcomings**

Besides the achievements, efficiency in use of available resources by Vietnam's health system has some limitations relating to allocative efficiency and technical efficiency. The pharmaceutical share of health is quite high, accounting for 42 per cent of total health expenditure and 70 per cent of total health insurance fund reimbursements to facilities. The shares of prescriptions including essential drugs (40.8 per cent) and generic drugs (28 per cent) are low, much lower than the shares recommended by WHO. Use of drugs, especially use of antibiotics, is subject so important shortcomings. At the district level, antibiotics are included in 60 per cent of prescriptions while conditions for microbiological tests and drug susceptibility testing remain limited. Overprovision of unnecessary and duplicated services and lab tests is acknowledged in comments of VSS and other sectoral agencies. Fee-for-service payments are still the most common provider payment method, used in 64.5 per cent of health care facilities, despite serious difficulties they cause to control of cost escalation. Capitation payments as currently designed are quite similar to the fee-for-service mechanism, and therefore have not achieved the goals of cost control. Imbalance in service delivery across the health system is a factor affecting efficiency in utilization of available resources. Many hospitals at higher levels are overcrowded while hospitals at lower levels are underutilized. According to an estimate of the World Bank, 20 per cent of all hospital admissions were unnecessary. This is due to an imbalance between inpatient and outpatient services. In addition, there is an imbalance in resource allocation at each level. The grassroots health facilities including commune health stations and district hospitals provide 73 per cent of health care services for the insured, yet the total amount they were reimbursed from the health insurance fund accounts for only 32 per cent of total health insurance reimbursements for medical services. Selection of drugs and services for use in medical service provision does not rely standards of cost-effectiveness. Of all drugs whose costs were reimbursed by health insurance in 2011, 72 per cent were non-essential drugs according to the drug classification of WHO. There is not yet an effective mechanism for monitoring and control of drug and service prices. Average growth in insured health care costs in the period 2006–2011 was 19.4 per cent for outpatient care and 13.3 per cent for inpatient care. VSS data indicate that growth in health insurance reimbursements for expensive high-tech services in 2011 compared to 2010 was 75 per cent and in 2012 compared to 2011 was estimated at 40 per cent.

### **2.2.6. Reforming provider payment methods in implementation of universal health care**

#### **Achievements and progress**

Input-based financing and partial users fee have been applied for a long time and fee-for-service is still the main provider payment method. More effective provider payments such as capitation and case mix payment are at initial stage of application and continue to undergo adjustment. In general, each method of payment has its own advantages and limitations.

State budget allocations provide health facilities with relatively stable resources and reduce barriers to accessing medical services. However, there is not yet a linkage between resources used and outputs or quality of services, which hinders effectiveness and equity in health care.

Fee-for-service payments can increase productivity of service delivery but can also encourage health facilities to provide services above the level that is needed in order to maximize revenues, affecting people's access and use of health care services.

Capitation has great potential to improve technical efficiency through promoting early provision of medical care services in the community. Efforts to further improve capitation towards harmonious integration of incentives for productivity and quality of services are widely supported by stakeholders. However, capitation needs to be balanced with the ability to meet demand for services and adequate size risk pool in order to limit imbalances in capitation funds.

The Law on Health Insurance and Decree 85 specify application of case mix payments and capitation for inpatient care in hospitals. Case mix payments were initiated in 2012 on a small scale and are expected to expand in the year 2015. The Ministry of Health, particularly the Department of Planning and Finance, is promoting collaborative research undertaken with technical and financial support from various partners to develop a harmonious system of provider payments applying capitation for outpatient services and case mix payments for inpatient services.

#### **Difficulties and shortcomings**

In general, reform of provider payments is facing difficulties due to a lack of necessary consensus about policies and resources to implement a uniform and comprehensive reform plan. Conditions and efforts to reform fee-for-service payments are not yet in place.

Strengthening of hospital autonomy and social mobilization can contribute to UHC (to increase coverage of quantity and types of health care services), but they also encourage health facilities to focus on providing high-tech services rather than basic health care services.

Informal payments remain an important factor negatively affecting effectiveness of provider payment reforms. It is hard to encourage coverage of basic and effective services through formal payment mechanisms when informal payments create perverse incentives towards inefficient use of high tech services.

Priority issues include the need to overcome resistance to change and establish necessary preconditions to use provider payments as a health system control knob, to deal with challenges hindering research and application of new provider payment methods including assignment of roles and responsibilities for developing and implementing provider payment reforms, ensuring a comprehensive design and appropriate mechanism to manage

quality improvement as part of capitation payment policy, and the need to develop a more reliable and consistent health information system to serve provider payment reforms.



## Chapter VI: Recommendations

On the basis of the update of the situation of the health system and in-depth analysis on the orientation towards UHC, this Report recommends some supplementary solutions in order to implement more effectively the tasks laid out in the Five-year plan (see details in Chapter I) and policy orientations and solutions to work towards UHC (see details in Chapters III and IV).

Below is a synthesis of the general recommendations in the report.

### 1. Health sector governance

- Recommend the Ministry of Health implement a review of 30 years of reforming the health system and propose an orientation and major solutions for continued health sector reforms and development in Vietnam. Complete draft Laws and Decrees according to the National Assembly and Government legislative agenda.
- On the basis of identifying UHC as a priority in the orientation of health policy development in Vietnam, the Ministry of Health should submit a draft Resolution/project on strengthening grassroots health care to the Communist Party and Government for approval and promulgation.
- Strengthen capacity of government staff and officials of units within the Ministry of Health to formulate policies, through short and long-term training in Vietnam and overseas.
- Review and evaluate the provincial health system organization in order to adjust the structure, functions and tasks assigned to different units to be more appropriate for local conditions. Complete the development of the health system master plan to the year 2020, a national strategy for development of the preventive medicine network, a decree on provincial health system organization,... towards improved quality of health services, reduced fragmentation, and increased investment effectiveness.
- Develop mechanisms and forms of cooperation between preventive medicine and medical facilities at each level. Research and propose re-establishment of the referral system. Develop and implement mechanisms to integrate activities between the public and private health sector.
- Reduce the number of focal points in management and direction for implementation of disease prevention and national health target programs; develop an integrated mechanism to strengthen linkage in preventive and curative service delivery; ensure uniform management and high level integration of health care facilities.
- Encourage planning and budgeting reforms in the provinces, pilot test and scale up results-based financing and other effective financial allocation mechanisms. Improve timeliness and quality of statistical data. Strengthen application of information technology in management, operations, and administrative procedure reforms. Budget sources should be clearly defined in plans and strategies together with appropriate mobilization approaches to ensure sufficient financial resources for implementation. Approve templates for health plans at different levels to allow synthesis into overall health plans and sub-sector health plans.
- Strengthen monitoring and evaluation of the implementation of health policies at the central and provincial levels. Develop a mechanism to gather feedback and comments from stakeholders in the process of implementing policies. Assign tasks to

departments, administrations and institutes to assess the status of implementing targets and tasks of the Five-year plan in their 6 month and annual reports. Strengthen monitoring and evaluation of the application of the six building blocks of the health system in sub-sector and sub-national health planning.

- Strengthen policy dialogue between policymaking bodies and policy implementing agencies, researchers and the people; develop evidence-informed policies.
- Complete the development and promulgate a circular guiding implementation of Decree 69/2008/ND-CP dated 30 May 2008. Develop a legal basis for promoting PPPs in the health sector. Organize effective implementation of Ministry of Health Circular No. 19/2013/TT-BYT on managing quality of medical services in hospitals.

## **2. Human resources for health**

- Develop long term plans for comprehensive reforms of the health human resources training system. Develop an accreditation system for health worker training quality and quality control of new medical school graduates. Organize effective implementation of Ministry of Health Circular No. 22/2013/TT-BYT on continuing medical education. Prioritize development and implementation of continuing medical education plans to update knowledge of health workers in the district and commune levels.
- Assess the effectiveness of policies and methods of attracting, retaining and strengthening capacity of health human resources in remote and isolated areas in order to make appropriate adjustment to policies. Strengthen training to update knowledge on location, where healthcare workers perform their duties; implement the salary supplement policies and create favorable conditions for health workers to serve disadvantaged areas. Refine the policies for investing in strengthening health human resources for preventive medicine and PHC. Develop effective mechanisms to ensure sufficient budget to cover incentives and allowances for local health workers to work at commune health stations and in outreach activities.
- Review and standardize training curricula for general practitioners, public health, and nursing. Develop standards and evaluation procedures for health workers based on the actual competencies, performance, efficiency and productivity of health workers. Ensure funds to implement refresher training for health workers at the grassroots level as required by the circular on continuing medical education and as stipulated by the Law on Examination and Treatment.
- Consolidate the health information system related to training, deployment of health workers in both public and private sectors in order to implement management of health human resources. Strengthen monitoring and supervision of implementation of existing policies on health human resources.

## **3. Health management information system**

- Improve the health information system architecture and formulate a master plan for developing the health information system.
- Ensure sufficient funds for investment in infrastructure and capacity building for health information system staff, so policies and plans can be implemented
- Issue a list of basic health indicators and the general statistical reporting system for commune, district and provincial levels. Develop general statistical reporting software for each level.

- Develop a system for monitoring priority health issues and set up a network for gathering information on mortality and cause of death, promote information collection on non-communicable diseases. Determine conditions needed for conducting a regular evaluation of disease burden and national health accounts.
- Develop a circular on health information dissemination. Widely disseminate information products through diverse forms.
- Standardize and digitalize statistical forms, apply information technology in developing an on-line statistical reporting system.
- Deploy ICD-10 disease coding and ICD-9 procedure coding uniformly in all medical facilities.
- Develop a circular regulating official forms for private sector statistical reporting.

#### **4. Pharmaceuticals and medical equipment**

##### **Strengthen people's access to drugs**

- Revise the Law on Pharmaceuticals and the National Drug Policy to the year 2020. Develop the draft project on a master plan for drug production development and distribution. Develop the Strategy for the development of the pharmaceutical sector to the year 2020.
- Strengthen capacity of domestic pharmaceutical and medical equipment companies; ensure provision of medication, vaccines and medical equipment.
- Issue the 6<sup>th</sup> Essential medicines list and a list of drugs reimbursed by health insurance. Develop policies on subsidizing the price of essential medicines for disadvantaged areas. Increase the number of drug types in commune health stations. Ensure adequate provision of essential medicines for health facilities in remote, mountainous, island and coastal areas.
- Develop plans for ensuring drug provision for HIV/AIDS, cancer, tuberculosis, hepatitis B and C patients.

##### **Safe and rational use of drugs**

- Strengthen the role of the drug and therapy committee in hospitals. Strictly implement regulations on buying and selling drugs according to prescription.
- Increase control over safe and rational use of drugs in health facilities and in the community. Develop indicators for evaluating rational use of drugs. Develop antibiotic monitoring systems nationwide.
- Tighten control over drug advertising. Implement communication and education on rational use of drugs.
- Improve infrastructure and strengthen health manpower for microbiology laboratories in order to ensure drug susceptibility testing before prescribing antibiotics. Strengthen management of sources and quality of traditional and herbal medicines.

##### **Control drug prices, reduce drug cost share in health spending**

- Adjust shortcomings and limitations in the current regulations on drug procurement. Strengthen inspection and supervision in accordance with Decree No. 93/2011/ND-CP dated 18 October 2011.

- Increase spending on essential drugs and on drugs for commune health stations.
- Study and propose amendments and supplements to the Law on Pharmaceuticals issued in 2005 towards specifying functions and obligations of ministries and sectors in managing drug prices.
- Implement strengthening capacity to produce generic drugs domestically with bulk packaging and direct supply from manufacturers to clinics.

#### **Medical equipment and facilities**

- Assess demand for and update the list of essential medical equipment for health facilities. Develop a database of medical equipment; set up a unit for health technology assessment. Approve a policy on prioritizing procurement and use of medical equipment manufactured by domestic companies.
- Promote disbursement of funds for projects aimed at developing infrastructure of provincial and district hospitals.

### **5. Coverage of preventive medicine, PHC, reproductive health and population-family planning services**

#### **Increase investment to improve and strengthen capacity of preventive medicine units and the grassroots health network**

- Assess management capacity and effectiveness of preventive and primary care service delivery in provincial and district preventive medicine centers and commune health stations and in national health target programs. Reform the preventive medicine system organization towards greater concentration, reducing the number of units, and strengthening quality and effectiveness of preventive medicine activities.
- Evaluate the effectiveness of policies aimed at investing in preventive medicine and health facilities at the district and commune level, including policies on medical training, using, maintaining and attracting health human resources, and policies on drug lists, medical equipment and facilities. Accelerate investment in and upgrading of provincial and district preventive medicine centers, maintain and scale up provincial preventive medicine centers that meet national standards, implement national benchmarks for commune health stations.
- Reform methods of budget estimation and allocation for commune health stations. Analyze and propose more appropriate forms for signing contracts insurance reimbursement of medical services provided by commune health stations. Ensure adequate state budget to pay for public health services.
- Prioritize high levels of investment to comprehensively reform the grassroots health network (commune health station building, medical equipment, staff and mechanisms and policies for their operation), particularly for mountainous, remote, isolated, and disadvantaged areas far from higher level hospitals.
- Strengthen commune health stations to be the first point of service provision for all types of clients with the main focus on universal access to health care.

#### **Effectively organize disease control, moving towards unified management of disease risks**

- Strengthen the role and responsibilities of all level of authorities, ministries, agencies and organizations. Develop mechanisms for cooperation and direction for disease

prevention programs and other health programs, and mechanisms for collaboration between preventive medicine and medical facilities at each level.

- Prioritize investment in prevention and control programs for non-communicable diseases, manage and control diseases and risk factors, integrate and link health activities and service delivery across preventive medicine and health care facilities at each level.
- Conduct research to identify basic health care services based on analysis and assessment of health care needs, cost-effectiveness and conditions for implementation of these services.
- For remote and mountainous regions, develop policies to effectively deploy and retain trained health workers including midwives, village health workers, village-based ethnic minority midwives. In very remote villages ensure appropriate deployment of village health workers and midwives.
- Refine the disease control information system. Develop indicators, official forms and consistent mechanisms for collecting and processing information about communicable diseases.

### **Consolidate population, family planning and reproductive health work**

- Expand to ensure universal access to sexual and reproductive health services in order to reduce unmet needs for these services through strengthening the overall six building blocks of the health system.
- Re-evaluate delivery of family planning and reproductive health care services; assign appropriate responsibilities for population offices and health facilities in implementing clinical and non-clinical professional activities.
- Call for commitment and active participation of all levels of authorities and sectors in controlling population growth, improving population quality and reducing increase in sex ratio at birth.

## **6. Coverage of medical services**

### **Strengthen grassroots level capacity for medical service delivery**

- Pilot and evaluate the model for linking commune and district health centers.
- Improve commune health station capacity, especially the capacity to manage non-communicable diseases and implement some national health target programs.
- Develop appropriate incentive mechanisms for commune health workers and mechanisms for attracting private doctors and herbal practitioners to participate in medical service delivery at the grassroots level.

### **Reduce hospital overcrowding**

- Promulgate guidelines assigning different medical services to different level facilities and a circular guiding appropriate referrals. Strengthen referrals with effective feedback from higher levels to lower levels.
- Implement projects for reducing hospital overcrowding and strengthening capacity of lower levels. Promote outpatient treatment, control admissions, and expand day treatment services. Pay special attention to proper management of chronic and non-communicable diseases.

### **Improve quality of medical services**

- Develop criteria, standards, tools and mechanisms to assess the quality of hospitals, commune health stations and other health care facilities. Complete the set of indicators for hospital quality assessment. Set up an independent quality accreditation organization for health care facilities. Develop a proposal for a project on hospital quality accreditation and certification of hospital quality.
- Supplement regulations and guidelines on improving medical service quality. Train and guide application of quality methods at medical facilities. Standardize medical techniques and promote technology transfer to lower levels. Strengthen inspection and supervision of compliance with laws on health care at health care facilities.
- Develop guidelines for providing medical services with high-end hotel services for people who can afford to pay, minimize negative effects of business partnerships and joint ventures between state and private hospitals. Study appropriate models for PPP in providing medical services. Strengthen inspection and supervision for private-sector health care activities.
- Develop and promulgate regulations for routine testing for inpatients and outpatients.
- Develop a project on patient satisfaction assessment instruments.

### **Continuity of care and referrals**

- Expand the scope of management of chronic non-communicable diseases at provincial, district and commune levels with a focus on community-based management. Implement Circular No. 01/2013/TT-BYT on lab test quality management.
- Refine and issue a circular guiding referrals with the objective of facilitating patients to rapidly access medical facilities and reducing cumbersome referral procedures
- Complete and issue guidelines stipulating which types of facilities should provide which types of technical medical services. Monitor, evaluate and make adjustments to the referral system.

### **Complete the legal and regulatory documents to implement the Law on Examination and Treatment**

- Recommend a revision to the Law on Examination and Treatment, license practitioners on the basis of practical skill examinations, grant licenses that are renewable after a set period of time, and link renewals with requirements for continuing medical education
- Review and select priority issues, compile and issue professional guidelines for treatment of common diseases in the immediate future.
- Strengthen application of information technology, improve medical system management capacity, reduce paperwork and hassles for patients. Actively implement electronic patient records and manage information on medical services, medical advice and telemedicine in order to improve quality and facilitate medical care activities.



## 7. Health financing

### Reduce household out-of-pocket spending on health

- To achieve UHC Vietnam needs to implement more uniform measures to reduce the household out-of-pocket spending share of total health expenditure to 30–40 per cent as recommended by WHO.
- In the long-term, develop a health financing system based on a combination of state budget revenue from taxes and health insurance; expand health insurance coverage to about 90 per cent of the entire population.
- In the short and medium term, reduce household out-of-pocket spending on health through implementing policies on expanding health insurance coverage; reform and widely adopt effective methods of payment; effectively implement Decision No. 14/2012/QĐ-TTg dated 1 March 2012 on amending and supplementing some articles of the Prime Ministerial Decision No. 139/2002/QĐ-TTg dated 15 October 2002 on health care for the poor.
- Conduct in-depth research on household out-of-pocket health spending to identify trends and causes of problems.

### Financial protection for disadvantaged and vulnerable groups

- Revise some articles in the Law on Health Insurance towards subsidizing health insurance premiums from the state budget for residents of disadvantaged areas; continue to expand coverage of financial protection for the elderly under 80 years of age; eliminate co-payment for the poor and ethnic minorities in disadvantaged areas; reduce co-payment rates and put in place stop loss provisions to limit risks of high cumulative co-payments for the near poor, with priority placed on disadvantaged areas.
- Ensure that Provincial People's Committees effectively implement health insurance policies for the poor and disadvantaged groups. The Government should specify the roles and responsibilities of Provincial People's Committees in mobilizing resources for the health care fund for the poor in their localities.
- Effectively use funds from the state budget and international health support projects for disadvantaged areas. Carry out studies to assess the economic impact of health care support policies on beneficiaries.
- In the long term, issue policies for full state budget subsidies to purchase health insurance with payment conditions appropriate for the poor and other disadvantaged groups.
- Complete policies and guidance along with feasible financial mechanisms and scheme to support outreach activities of commune and district health workers.

### Expand health insurance coverage

- Expand health insurance coverage to the informal employment sector in private enterprises. VSS needs to be empowered with specialized inspection of payment of insurance premiums. Set stricter sanctions on violation, with the perspective that health insurance is, in fact, a special tax earmarked for health care.
- Expand health insurance coverage for the near poor. Increase the state subsidy for insurance premiums from the existing minimum of 70 per cent up to 100 per cent.

- Implement health insurance coverage in the informal employment sector for people with above average income. Consider potential for increasing premium subsidies from the state budget.
- Continue to increase state budget spending on health and use the annual increase in state spending to support people's enrollment in health insurance, creating an equitable, efficient and developed health system.
- Include targets for health insurance coverage in the Resolution on annual socio-economic development of the National Assembly.

#### **Ensure sustainability and cost-effectiveness in using health insurance**

- *For developing the list of drugs and medical services to be reimbursed by health insurance, rely on principles requiring evidence of cost effectiveness and affordability to the people.* Promulgate regulations on principles and procedures for developing and updating a list of drugs and medical services paid from the state budget or health insurance fund based on evidence of cost effectiveness.
- Implement health technology assessment activities for selecting affordable, safe and effective medical services.
- Select affordable, safe and effective drugs. Develop a drug list reimbursable by health insurance on the basis of the list of essential drugs recommended by WHO. Increase efficiency of drug procurement.
- Consider adjustments to regulations to ensure that the health insurance fund only pays for health care costs of the insured beyond a deductible amount.

#### **Improve social health insurance capacity for financial protection**

- Consider adjustments and amendment to the Law on Health Insurance so that the stop loss provision limits the maximum amount of co-payments in a year to an amount that does not exceed ability to pay, which varies depending on the average income of each group of the insured.
- Ensure a balance between the average health insurance premium and the average medical examination and treatment cost per capita. Reduce ineffective costs (e.g., paying for drugs and technical services that are not cost effective, etc.). Adjust the increase in hospital revenues, increase access to health services at lower levels. Adjust insurance premiums.
- Reform methods of payment to gradually reduce use of fee-for-service and adjust and amend financial autonomy and social mobilization policies.

#### **Mobilize financial resources to implement universal health care coverage**

##### **Increase state budget spending on health**

- Recommend the National Assembly and the Government to maintain the increase in budget spending on health at a higher rate than in overall budget spending and achieve a share of spending on health in total budget expenditures of 10 per cent.
- Study to identify demand for state budget mobilization for health care, creating an evidence base for health budget allocation of the Government and the Ministry of Finance.

**Increase financial mobilization through health insurance**

- Refine legislations and strengthen inspection and supervision to ensure implementation of regulations on compulsory contribution to health insurance. Expand universal health insurance coverage.
- Continue orientation towards universal health insurance; gradually shift from allocating state budget for hospitals to supporting the insured with a roadmap of appropriate and adequate pricing of health services to improve the quality of health insurance.

**Apply innovative initiatives to mobilize financial resources for health**

- Study taxation of unhealthy products such as tobacco and alcohol as mechanisms to increase financial resources for health care.

**Increase efficiency in using existing resources**

- Study to identify waste of existing resources in the health sector.
- Review packages of medical services and drug lists on the basis of cost-effectiveness studies for selecting health insurance payment services. Adopt results of health technology assessment in providing evidence for appropriate selection of drugs and medical equipment that meet cost effectiveness criteria.
- Openly post prices of drugs and health services and set up a system for monitoring drug and service prices across the health insurance payment system.

**Reform provider payment methods**

**Develop a comprehensive program for reforming provider payment methods**

- Develop a comprehensive program for reforming payment methods for health care services. Create a policy consensus and identify roles and responsibilities of stakeholders.
- Promote the process of applying a system of payment methods with harmonious integration of new and more effective payment methods such as fee-for-service, capitation and case mix payments.
- Review resources and payment methods for preventive services, including for management and community-based care.

**Implement adjustments to capitation to meet more rigorous requirements**

- Capitation needs to be based on a more systematic calculation method. The capitation fund and capitation rate should be set after making necessary adjustments to population, age, sex and disease burden in the locality.
- Basic PHC services are covered by health insurance fund and implemented uniformly with measures for service quality management.
- Adjust payment rates for both fee-for-service and case mix payments towards equivalence with the grassroots rates for services/ diagnostic groups that can be provided/treated at the grassroots level.
- Pay attention to and promote capacity for health technology assessment in both preventive and curative medicine and rehabilitation to serve reform of provider

payment methods. Promote research and implementation of measures for minimizing unofficial payments.

**Implement reforms of provider payment methods consistent with reforms in organization of health care service delivery and other related financial mechanisms, ensure prerequisite conditions are met for application of more effective payment methods**

- Accelerate progress in reforming provider payments (capitation, case mix).
- Implement linkages in management and provision of preventive and curative care services. Promote the idea that fewer patients and fewer diseases the better.
- Increase financial resources and strengthen the role of the third party payer (health insurance fund); reduce the out-of-pocket share of health expenditures. Minimize negative impacts of existing financial autonomy policies.
- Arrange adequate resources for monitoring, evaluating, adjusting and refining policies and contents of the program for provider payments reform.
- Enhance international cooperation to promote adjustments of capitation; strengthen capacity of the health management information system.

## Appendix: JAHR monitoring and evaluation indicators

Monitoring indicators		Units	Disaggregation	Year					Indicator type	Information source
				2009	2010	2011	2012	2015		
	INPUT INDICATORS									
	Human resources and infrastructure									
1	Doctors per 10 000 people	Per 10 000 people	National	6.59	7.20	7.33	7.46	8,0	5-yr plan	MOH-HSYB
2	University-trained pharmacists per 10 000 people	Per 10 000 people	National	1.77	1.76	1.92	..	1,8	5-yr plan	MOH-HSYB
3	Proportion of commune health stations with doctor	%	National	67.7	70.0	71.9	76.0	80	5-yr plan	MOH-HSBY
			Red River Delta	73.2	75.7	77.5	78.7	..		
			Northern midlands and mountains	58.2	61.9	63.5	66.4	..		
			North and south central coast	65.9	66.2	66.0	68.8	..		
			Central Highlands	49.5	57.8	66.5	69.7	..		
			Southeast	78.4	80.5	85.0	83.4	..		
			Mekong River Delta	80.1	80.7	82.2	87.2	..		
4	Proportion of commune health stations with obstetrics/pediatrics assistant doctor or midwife	%	National	95.7	95.6	95.3	93.4	>95	5-yr plan	MOH-HSYB
			Red River Delta	96.3	92.5	95.3	92.2	..		
			Northern midlands and mountains	94.0	95.3	89.7	95.1	..		
			North and south central coast	96.2	96.6	90.5	94.5	..		
			Central Highlands	95.4	96.7	99.2	97.0	..		
			Southeast	97.2	97.5	100.0	99.1	..		
			Mekong River Delta	96.1	97.3	99.1	96.7	..		
	Proportion of rural villages served by a village health	%	National	96.6	97.5	96.9	96.6	90	5-yr plan	MOH-HSYB
			Red River Delta	97.8	98.4	97.9	98.0	..		

Monitoring indicators		Units	Disaggregation	Year					Indicator type	Information source
				2009	2010	2011	2012	2015		
5	worker		Northern midlands and mountains	97.1	97.8	96.2	96.3	..		
			North and south central coast	96.0	98.2	98.0	97.9	..		
			Central Highlands	97.8	97.2	98.0	98.1	..		
			Southeast	99.9	99.9	99.9	96.6	..		
			Mekong River Delta	92.2	92.4	92.5	90.8	..		
6	Number of inpatient beds	Per 10 000 people	Public	20.8	21.7	22.5	24.3	23	5-yr plan	MOH-HSYB
			Private	0.68	..	..	1.1	..		VAMS
7	Proportion of communes meeting national commune health benchmarks (New benchmarks applied starting 2011) Reported data for 2011–2012 indicate achievement for a mix of old and new standards	%	National	65.4 (2001-10)	80.1 (2001-10)	76.8	74.1	60 (2011–20)	5-yr plan	MOH-HSYB
			Red River Delta	78.6	91.1	89.6	90.3	..		
			Northern midlands and mountains	55.4	74.3	61.9	53.0	..		
			North and south central coast	61.0	73.8	72.5	68.5	..		
			Central Highlands	48.1	64.7	61.1	61.9	..		
			Southeast	72.5	87.5	90.2	90.7	..		
			Mekong River Delta	72.7	86.5	88.6	87.1	..		
	Health financing									
8	Public (state budget, social health insurance, external assistance) share of total health spending	%	National	42.2	44.6	..		>=50%		MOH-NHA
9	Health spending share of GDP	%	National	6.6	6.9			..		MOH-NHA
10	Per capita health spending (current prices)	1000 VND	National		741.6			..		GSO-VHLSS
			Red River Delta		890.4			..		



Monitoring indicators		Units	Disaggregation	Year					Indicator type	Information source
				2009	2010	2011	2012	2015		
			Northern midlands and mountains		454.8			..		
			North and south central coast		642.0			..		
			Central Highlands		656.4			..		
			Southeast		939.6			..		
			Mekong River Delta		741.6			..		
11	Out-of-pocket share of total health spending	%	National	50.5	47.6			..		MOH-NHA
Pharmaceuticals										
12	Substandard share of sampled drugs	Per 10 000 samples taken	National	330	312					MOH-DAV
13	Number of drug outlets per 10 000 people	10 000 people	National	4.9	5.0	4.6				
PROCESS AND OUTCOME INDICATORS										
Service coverage										
14	Inpatient admissions	Per 10 000 people	National	1330	1370	1374		..		MOH-HSYB
15	Outpatient consultations	Per 10 000 people	National	3770	3980	3988		..		MOH-HSYB
16	Proportion of people seeking inpatient or outpatient care who have health insurance or fee exemption card	%	National		66.7	..		..		GSO-VHLSS
			Poorest		74.1	..				
			Near poor		61.2	..				
			Average		60.4	..				
			Above average		66.6	..				
			Richest		70.9	..				
17	Average length of inpatient admission	days	National	6.9	7.35	6.83		..		MOH-HSYB
			Central	10.8	10.3	9.41		..		

Monitoring indicators		Units	Disaggregation	Year					Indicator type	Information source
				2009	2010	2011	2012	2015		
			Sectoral	11.0	11.0	6.55		..		
			Provincial and district	6.7	7.1	6.61		..		
18	Proportion of children under age 1 who are fully immunized	%	National	96,3	94,6 (7 vac-cines)	96,0 (8 vac-cines)	95,9 (8 vac-cines)	>90 (8 vac-cines)	MDG, 5-yr plan	MOH-NTP
			Red River Delta	98.5	98.6	98.2	97.7	>95		
			Northern midlands and mountains	94.3	94.5	94.5	95.5	>90		
			North and south central coast	95.8	97.3	95.0	97.1	>95		
			Central Highlands	96.2	93.8	95.4	96.5	>90		
			Southeast	95.9	94.1	96.8	93.3	>90		
			Mekong River Delta	96.1	88.1	94.8	95.0	>90		
19	Proportion of women giving birth who had 3 or more antenatal visits over 3 trimesters	%	National	..	79.2	86.7	89.4	80 (87*)	MDG, NTP, Natl. Action Plan*	MOH-NTP
20	Proportion of women giving birth who were assisted by a trained health worker	%	National	94.4	97.1	97.2	97.9	96 (98*)	MDG, NTP, Natl. Action Plan*	MOH-NTP
21	Proportion of pregnant women fully vaccinated against tetanus	%	National	93.7	93.5	94.6	95.5	..		
22	Proportion of mothers and newborns given postpartum/postnatal care	%	National	89.2	87.8	87.2	87.3	85.0	NTP	MOH-NTP
23	Contraceptive prevalence rate among women aged 15–49	%	National	..	78.0	78.2	76.2	70.1	NTP	GSO-PCFPS

Monitoring indicators		Units	Disaggregation	Year					Indicator type	Information source
				2009	2010	2011	2012	2015		
24	Proportion of women aged 15–49 with unmet need for family planning	%	National	..	..	4.3	..		MDG	GSO-MICS
25	TB case detection rate (all forms)	Per 100 000 people	National	114.1	113.9	114.0	113.9			MOH-HSYB
26	Pulmonary TB (AFB+) case detection rate	Per 100 000 people	National	52.2 (59.6)	52.7 (60.0)	57.7	57.5	..		MOH-NTP (HSYB 2011)
27	Cure rate for new cases of pulmonary TB (AFB+)	Per 100 000 people	National	90.6	90.5	90.8	91.1	..		MOH-NTP
28	HIV detection rate	Per 100 000 people	National	16.1	15.9	16.1	15.9	..	NTP	MOH-NTP
29	HIV/AIDS prevalence	Per 100 000 people	National	187.0	211.3	224.4	237.5	<300.0	5-yr plan	MOH-NTP
30	Dengue fever new case detection rate	Per 100 000 people	National	12.2	14.8	16.1		..		MOH-NTP
31	Malaria incidence (passive detection) rate	Per 100 000 people	National	70.8	62.0	51.6	49	<15 (2020)	Natl. Strategy	MOH-NTP
32	Leprosy prevalence rate	Per 100 000 people	National	0.04	0.04	0.04	0.03	0.2	NTP	MOH-NTP
33	Leprosy new case detection rate	Per 100 000 people	National	0.41	0.41	0.43	0.34	0.3	NTP	MOH-NTP
34	Food poisoning	Cases	Number of people suffering food poisoning	5212	5397	4700	5541	..		MOH-NTP
		Incidents	Incidents of food poisoning	152	173	148	168	..		
		Deaths	Deaths due to food poisoning	35	49	27	34	..		
35	Health insurance coverage rate	%	National	58.2	60.3	65.0	66.8	70		MOH
Behavior and risk factors										
36	Smoking prevalence rate	%	National	..	47.4			..		MOH

Monitoring indicators		Units	Disaggregation	Year					Indicator type	Information source
				2009	2010	2011	2012	2015		
37	Proportion of rural households using sanitary toilet	%	National	48	51.4	71.4	NA	65	MDG	MOH-NTP
38	Proportion of rural households using clean drinking water	%	National	79	75	89.4	NA	85	MDG	MOH-NTP
39	Proportion of medical facilities whose medical solid waste is treated according to national environmental standards	%	National	74.0	..	..		80		MOH
40	Malnutrition rate of children under age 5 (weight for age)	%	National	18.9	17.5	16.8	16.2	15.0	5-yr plan	NIN
			Red River Delta	17.5	14.6	14.2	11.8	..		
			Northern midlands and mountains	24.0	22.1	21.2	20.9	..		
			North and south central coast	20.8	19.8	17.8	19.5	..		
			Central Highlands	26.5	24.7	23.8	25.0	..		
			Southeast	14.4	10.7	11.3	11.3	..		
			Mekong River Delta	18.3	16.8	15.4	14.8	..		

	Stunting rate of children under age 5 (height for age)	%	National	31.9	29.3	27.5	26.7	26.0	NTP	NIN
			Red River Delta	28.1	25.5	24.8	21.9	..		
			Northern midlands and mountains	34.8	33.7	32.4	31.9	..		

Monitoring indicators		Units	Disaggregation	Year					Indicator type	Information source
				2009	2010	2011	2012	2015		
41			North and south central coast	31,9	31,4	29,7	31,2	..		
			Central Highlands	37.0	35.2	35.0	36.8	..		
			Southeast	25.9	19.2	21.5	20.7	..		
			Mekong River Delta	29.4	28.2	26.8	26.0	..		
43	Sex ratio at birth	Number of boys per 100 girls	National	111.0	111.2	111.9	112.3	<113	5-yr plan	GSO, Census & SPCFP
			Red River Delta	115.3	116.2	122.4	120.9	..		
			Northern midlands and mountains	108.5	109.9	110.4	108.2	..		
			North and south central coast	109.7	114.3	103.3	112.1	..		
			Central Highlands	105.6	108.2	104.3	98.4	..		
			Southeast	109.9	105.9	108.8	111.9	..		
			Mekong River Delta	109.9	108.3	114.9	111.5	..		
	OUTCOME/IMPACT									
	Health indicators									
44	Life expectancy at birth)	Years	National	72.8	72.9	73.0	73.0	74	5-yr plan	GSO, Census & SPCFP
			Male	70.2	70.3	70.4	70.4	..		
			Female	75.6	75.7	75.8	75.8	..		
45	Total fertility rate (TFR)	Average number of children per woman in childbearing age	National	2.03	2.00	1.99	2.05	1.86		GSO, Census & SPCFP
			Red River Delta	2.11	2.04	2.06	2.11	..		
			Northern midlands and mountains	2.24	2.22	2.21	2.31	..		

Monitoring indicators		Units	Disaggregation	Year					Indicator type	Information source
				2009	2010	2011	2012	2015		
			North and south central coast	2.21	2.21	2.21	2.32	..		
			Central Highlands	2.65	2.63	2.58	2.43	..		
			Southeast	1.69	1.68	1.59	1.57	..		
			Mekong River Delta	1.84	1.80	1.80	1.92	..		
46	Annual rate of decline in fertility (negative number indicates increase)	‰	National	-0.9	0.5	0.5	-0.3	0.1	5-yr plan	GSO, SPCFP
47	Population growth rate	%	National	1.06	1.05	1.04	1.06	0.93	5-yr plan	GSO, Census & SPCFP
48	Population	Million people	National	86.0	86.9	87.8	88.77	<93.0	5-yr plan	GSO, Census & SPCFP
			Red River Delta	19.6	19.8	20.0	20.2	..		
			Northern midlands and mountains	11.1	11.2	11.3	11.4	..		
			North and south central coast	18.9	18.9	19.0	19.2	..		
			Central Highlands	5.1	5.2	5.3	5.4	..		
			Southeast	14.1	14.6	14.9	15.2	..		
			Mekong River Delta	17.2	17.3	17.3	17.4	..		
			Urban	25.5	26.5	27.8	28.6	..		
49	Maternal mortality ratio	Per 100 000 live births	National	69	..	..	..	58.3	MDG, 5-yr plan	GSO-Census
50	Infant mortality rate (IMR)	Per 1000 live births	National	16.0	15.8	15.5	15.4	14.8	MDG, 5-yr plan	GSO, SPCFP
			Red River Delta	12.4	12.3	12.5	12.3	..		
			Northern midlands and mountains	24.5	24.3	23.0	23.5	..		
			North and south central coast	17.2	17.1	17.1	17.1	..		



Monitoring indicators		Units	Disaggregation	Year					Indicator type	Information source
				2009	2010	2011	2012	2015		
			Central Highlands	27.3	26.8	24.3	26.4	..		
			Southeast	10.0	9.6	9.3	9.2	..		
			Mekong River Delta	13.3	12.6	12.2	12.0	..		
51	Under-five mortality rate (U5MR)	Per 1000 live births	National	24.1	23.8	23.3	23.2	19.3	MDG, 5-yr plan	GSO, PCFPS
Financial protection										
52	Proportion of households facing catastrophic spending (out-of-pocket spending exceeds 40 per cent of ability to pay of the household)	%	National	5.5 (2008)	3.9			..		Calculated from VHLSS [155]

DAV Drug Administration of Vietnam  
 GSO General Statistics Office  
 HSYB Health Statistics Yearbook  
 MDG Millennium Development Goal  
 MICS Multi-indicator cluster survey  
 MOH Ministry of Health

NHA National Health Accounts  
 NIN National Institute of Nutrition  
 NTP National Target Program  
 PCFPS Population Change and Family Planning Survey (GSO)  
 VAMS Vietnam Administration of Medical Services  
 VHLSS Vietnam Household Living Standards Survey

## References

1. Trường Đại học Y tế công cộng, *Báo cáo đánh giá hiện trạng đào tạo nhân lực y tế tại Việt Nam*, 2012: Hà Nội.
2. Bộ Y tế, *Niên giám thống kê y tế 2011*, 2011: Hà Nội.
3. Viện Chiến lược và Chính sách Y tế, *Báo cáo nghiên cứu "Phân tích các yếu tố ảnh hưởng tới khả năng thu hút và duy trì nhân lực y tế ở khu vực miền núi"*, 2012: Hà Nội.
4. Mark Vujicic et al, *Attracting doctors and medical students to rural Vietnam – insight from a Discrete Choice Experiment*. 2010.
5. Viện Chiến lược và Chính sách Y tế, *Báo cáo nghiên cứu về Thực trạng sử dụng Bác sỹ, cử nhân điều dưỡng sau tốt nghiệp*, 2011: Hà Nội.
6. Trần Chí Liêm and Đinh Thị Phương Hoài, *Đánh giá kiến thức cán bộ y tế và trang thiết bị tại TYT xã về chăm sóc trẻ sơ sinh*, 2009.
7. Lê Văn Thêm, *Thực trạng hoạt động của bác sỹ tại trạm y tế xã và đánh giá hiệu quả can thiệp nâng cao chất lượng hoạt động của trạm y tế xã tỉnh Hải Dương*, 2013, Trường Đại học Kỹ thuật y tế Hải Dương.
8. Thủ tướng Chính phủ, *Quyết định số 122/2013/QĐ-Ttg ngày 10/1/2013 phê duyệt Chiến lược quốc gia về bảo vệ, chăm sóc và nâng cao sức khỏe nhân dân giai đoạn 2011-2020, tầm nhìn đến 2030*, 2013, Văn phòng Chính phủ: Hà Nội.
9. Thủ tướng Chính phủ, *Quyết định 705/QĐ-Ttg của Thủ tướng Chính phủ về việc nâng mức hỗ trợ đóng BHYT cho một số đối tượng người thuộc hộ gia đình cận nghèo*, 2013, Văn phòng Chính phủ: Hà Nội.
10. Bộ Tài chính. *Số liệu về ngân sách nhà nước*, [http://www.mof.gov.vn/portal/page/portal/mof\\_vn/1351583/2126549/2117076](http://www.mof.gov.vn/portal/page/portal/mof_vn/1351583/2126549/2117076). 2012.
11. Ministry of Health and World Health Organization, *National Health Accounts implemented in Vietnam for 1998-2010 [Tài khoản y tế quốc gia thực hiện ở Việt Nam thời kỳ 1998-2010]*, 2011, Statistical Publishing House: Hanoi.
12. Bộ Y tế, *Báo cáo tổng kết công tác y tế năm 2012, Nhiệm vụ và các giải pháp thực hiện trong năm 2013*, 2013: Hà Nội.
13. Bộ Y tế, *Báo cáo gửi Ủy ban các vấn đề xã hội của Quốc hội về kết quả đầu tư từ trái phiếu Chính phủ*, 2013: Hà Nội.
14. Vụ Kế hoạch – Tài chính, *Báo cáo thực trạng và giải pháp tăng cường quản lý ODA do Bộ Y tế quản lý, ngày 17 tháng 1*, 2013: Hà Nội.
15. Bộ Y tế, *Báo cáo tình hình vận động và thực hiện dự án ODA QIV/2012 của Bộ Y tế gửi Bộ Kế hoạch và đầu tư tháng 2/2013*, 2013.
16. Chính phủ, *Nghị quyết số 11/2011/NQ-CP ngày 24/2/2011, về những giải pháp chủ yếu tập trung kiểm chế lạm phát, ổn định kinh tế vĩ mô, bảo đảm an sinh xã hội*, 2011, Văn phòng Chính phủ: Hà Nội.
17. Quốc hội nước CHXHCN Việt Nam, *Nghị quyết số 18/2008/NQ-QH12 về đẩy mạnh chính sách, pháp luật xã hội hóa để nâng cao chất lượng CSSK nhân dân*, Văn phòng quốc hội, Editor 2008.
18. Bảo hiểm xã hội Việt Nam, *Báo cáo kết quả thực hiện chính sách pháp luật về BHYT giai đoạn 2009-2012 gửi Ủy ban các vấn đề xã hội của Quốc hội*, 2013, BHXH Việt Nam: Hà Nội.
19. Ngân hàng Thế giới, *Tiến tới BHYT toàn dân ở Việt Nam: Đánh giá và giải pháp*, 2013.
20. Bộ Y tế, *Đề án thực hiện lộ trình tiến tới bảo hiểm y tế giai đoạn 2012-2015 và 2020*, 2013.
21. Viện Chiến lược và Chính sách Y tế, *Báo cáo đánh giá 3 năm thực hiện Luật BHYT và đề xuất sửa đổi, bổ sung một số điều của Luật BHYT (Đề tài cấp Bộ)*, 2013: Hà Nội.
22. Viện Chiến lược và Chính sách y tế, *Đánh giá việc thực hiện chính sách tự chủ bệnh viện tại 18 bệnh viện công lập*, 2009: Hà Nội.
23. Viện Chiến lược và Chính sách Y tế, *Đánh giá việc thực hiện chức năng nhiệm vụ của TYT xã tại các vùng miền*, 2011: Hà Nội.
24. Dự án hỗ trợ y tế các tỉnh Bắc Trung Bộ and Bộ Y tế, *Báo cáo tình hình thực hiện Dự án 2013*: Hà Nội.
25. Dự án hỗ trợ y tế các tỉnh Bắc Trung Bộ and Bộ Y tế, *Sổ tay hướng dẫn thực hiện thí điểm mô hình Phân bổ tài chính dựa trên kết quả (RBF) tại Nghệ An*, 2013: Hà Nội.
26. Minh Hải, *Giá thuốc bệnh viện giảm 30%*. [http://vnmedia.vn/VN/suc-khoe/tin-tuc/73\\_1056027/gia\\_thuoc\\_tai\\_benh\\_vien\\_giam\\_toi\\_30.html](http://vnmedia.vn/VN/suc-khoe/tin-tuc/73_1056027/gia_thuoc_tai_benh_vien_giam_toi_30.html), in VN Media.vn 2013: Hà Nội.
27. Cục Quản lý Dược, *Báo cáo kết quả thực hiện năm 2012 và kế hoạch năm 2013*, 2013: Hà Nội.

28. Viện Chiến lược và Chính sách Y tế and Cục Quản lý Dược, *Dự thảo báo cáo “Đánh giá thực hiện chính sách thuốc quốc gia về thuốc giai đoạn 1996-2010”*, 2011: Hà Nội.
29. Minh Khang, *Giá thuốc hết thời “nhảy múa”?* <http://www.sggp.org.vn/thuoc/2013/3/313789/> ngày 19/03/2013, in *Sài gòn giải phóng online* 2013.
30. Báo Lao động, *Sống trong vùng được liệu vẫn thiếu thuốc*, <http://laodong.com.vn/kinh-doanh/song-trong-vung-duoc-lieu-van-thieu-thuoc/96939.blđ>, ngày 26/12/2012, in *Sài gòn giải phóng online* 2012.
31. Bộ Y tế, *Quyết định số 4048/QĐ-BYT ngày 22/10/2012 quy định chức năng, nhiệm vụ, quyền hạn và cơ cấu tổ chức của Cục công nghệ thông tin thuộc Bộ Y tế*, 2012: Hà Nội.
32. Thủ tướng Chính phủ, *Quyết định số 43/2010/QĐ-TTg ngày 2/6/2010 ban hành chỉ tiêu thống kê quốc gia*, 2010, Văn phòng Chính phủ: Hà Nội.
33. Thủ tướng Chính phủ, *Quyết định số 312/2010/QĐ-TTg ngày 2/3/2010 phê duyệt Đề án đổi mới đồng bộ các chỉ tiêu thống kê*, 2010, Văn phòng Chính phủ: Hà Nội.
34. Bộ Y tế, *Báo cáo điều tra nguồn nhân lực thống tin thống kê năm 2012*, 2012: Hà Nội.
35. Thủ tướng Chính phủ, *Quyết định số 52/2009/QĐ-TTg ngày 09/4/2009 phê duyệt đề án Kiểm soát dân số khu vực biển, đảo và ven biển giai đoạn 2009 - 2020*, 2009, Văn phòng Chính phủ: Hà Nội.
36. Tổng cục dân số, *Báo cáo kết quả 3 năm triển khai thực hiện đề án 52 về Kiểm soát dân số khu vực biển, đảo và ven biển giai đoạn 2009 – 2020*, 2012, Văn phòng Chính phủ: Hà Nội.
37. Thủ tướng Chính phủ, *Quyết định số 317/2013/QĐ-TTg phê duyệt Đề án phát triển y tế biển, đảo đến năm 2020*, 2013, Văn phòng Chính phủ: Hà Nội.
38. Viện Chiến lược và Chính sách y tế, *Thực trạng nhu cầu và sử dụng bác sĩ sau ra trường*, 2009: Hà Nội.
39. Thủ tướng Chính phủ, *Quyết định số 255/2006/QĐ-TTg phê duyệt Chiến lược quốc gia y tế dự phòng Việt Nam đến năm 2010 và định hướng đến năm 2020*, 2006, Văn phòng Chính phủ: Hà Nội.
40. Thủ tướng Chính phủ, *Quyết định số 608/2012/QĐ-TTg về Chiến lược Quốc gia phòng chống HIV/AIDS đến năm 2020 tầm nhìn 2030*, 2012, Văn phòng Chính phủ: Hà Nội.
41. Thủ tướng Chính phủ, *Quyết định số 1920/QĐ-TTg về việc phê duyệt chiến lược quốc gia phòng chống và loại trừ bệnh sốt rét ở Việt Nam giai đoạn 2011 - 2020 và định hướng đến năm 2030*, 2011, Văn phòng Chính phủ: Hà Nội.
42. Thủ tướng Chính phủ, *Quyết định 1208/QĐ-TTg năm 2012 do Thủ tướng Chính phủ ban hành phê duyệt Chương trình mục tiêu quốc gia y tế giai đoạn 2012 – 2015*, 2012, Văn phòng Chính phủ: Hà Nội.
43. Cục Y tế dự phòng, *Báo cáo đánh giá kết quả thực hiện công tác YTDP năm 2012*, 2013: Hà Nội.
44. Cục Phòng chống HIV/AIDS, *Báo cáo công tác phòng chống HIV/AIDS năm 2012 và kế hoạch công tác năm 2013*, 2013: Hà Nội.
45. Cục Phòng chống HIV/AIDS. *Báo cáo tổng kết công tác phòng, chống HIV/AIDS trong toàn quốc đến hết năm 2012*. 2013; Available from: [http://www.vaac.gov.vn/Desktop.aspx/Noi-dung/Tinh-hinh-dich/Bao\\_cao\\_tong\\_ket\\_cong\\_tac\\_phong\\_chong\\_HIVAIDS\\_nam\\_2012\\_va\\_ke\\_hoach\\_trong\\_tam\\_nam\\_2013/](http://www.vaac.gov.vn/Desktop.aspx/Noi-dung/Tinh-hinh-dich/Bao_cao_tong_ket_cong_tac_phong_chong_HIVAIDS_nam_2012_va_ke_hoach_trong_tam_nam_2013/)
46. Viện Tim mạch trung ương, *Báo cáo tổng kết Dự án Phòng chống Tăng Huyết áp (THA) thuộc Chương trình Mục tiêu quốc gia năm 2011*, 2012, Viện Tim mạch trung ương: Hà Nội.
47. Viện Chiến lược và chính sách Y tế, *Báo cáo đánh giá thực hiện kế hoạch chương trình phòng chống Đái tháo đường giai đoạn 2009 – 2011*, 2013: Hà Nội.
48. Viện Mắt trung ương, *Báo cáo công tác phòng, chống mù lòa 2011-2012 và phương hướng hoạt động 2013* 2013, Viện Mắt trung ương: Hà Nội.
49. Bộ Y tế, *Báo cáo tổng kết hoạt động Dự án phòng chống bệnh phổi tắc nghẽn mạn tính năm 2012*, 2013: Hà Nội.
50. Cục An toàn thực phẩm, *Báo cáo Tổng kết Chương trình mục tiêu quốc gia Vệ sinh an toàn thực phẩm năm 2012 và triển khai kế hoạch năm 2013*, 2013: Hà Nội.
51. Quốc hội nước CHXHCN Việt Nam, *Luật số 09/2012/QH13 về Luật phòng chống tác hại thuốc lá*, Văn phòng Quốc hội, Editor 2012.
52. Nguyễn Văn Bắc và các cộng sự, *Nghiên cứu thực trạng công tác y tế trường học khối phổ thông và tình hình bệnh tật của học sinh năm 2010 tại Việt Nam, từ đó đưa ra một số giải pháp dự phòng*, 2010: Cục Y tế dự phòng.
53. Vụ Sức khỏe bà mẹ - trẻ em, *Báo cáo công tác CSSKSS 2012 – Phương hướng nhiệm vụ 2013*, 2013: Hà Nội.

54. Viện Dinh Dưỡng. *Trang Số liệu thống kê*. 2012 [13/8/2012]; Available from: <http://viendinhduong.vn/news/vi/106/61/0/a/so-lieu-thong-ke-ve-tinh-trang-dinh-duong-tre-em-qua-cac-nam.aspx>.
55. Tổng cục Thống kê, *Điều tra Biến động dân số và KHHGD thời điểm 1/4/2012: Các kết quả chủ yếu*. 2013, Hà Nội.
56. Tổng cục Thống kê, UNICEF, and UNFPA, *Điều tra đánh giá các mục tiêu trẻ em và phụ nữ (MICS)*, 2011: Hà Nội.
57. Văn phòng Chính phủ, *Thông báo số 385/TB-VPCP ngày 21/11/2012 về ý kiến kết luận của Phó thủ tướng Vũ Văn Ninh tại cuộc họp Ban chỉ đạo Trung ương Chương trình mục tiêu quốc gia xây dựng nông thôn mới giai đoạn 2010-2020*, 2012, Văn phòng Chính phủ: Hà Nội.
58. Tổng cục Thống kê (Bộ Kế hoạch và Đầu tư), *Tổng điều tra dân số và nhà ở Việt Nam năm 2009 - Mức sinh và mức chết ở Việt Nam: Thực trạng, xu hướng và những khác biệt*. 2011, Hà Nội.
59. Chương trình giám sát, theo dõi và đánh giá nhiễm HIV/AIDS. Viện Vệ sinh dịch tễ Trung ương, *Báo cáo kết quả giám sát trọng điểm HIV/STI năm 2011*. 2011.
60. National Committee for AIDS, Drugs and Prostitution Prevention and Control,, *Viet Nam AIDS Response Progress Report 2012. Following up the 2011 Political Declaration on HIV/AIDS. Reporting Period January 2010–December 2011.*, 2012: Hà Nội.
61. Bộ Y tế, *Báo cáo số 509/BC-BYT, ngày 8/7/2013, Tổng hợp tình hình thực hiện Mục tiêu phát triển Thiên niên kỷ về y tế*, 2013.
62. United Nations Statistics Division. *Millennium Development Goals Indicators - The Official United Nations Site for the MDG Indicators*. 2013 [cited 2013 9 September]; Available from: <http://mdgs.un.org/unsd/mdg/Default.aspx>.
63. Bộ Y tế, Nhóm Công tác Kỹ thuật Quốc gia về Ước tính và Dự báo HIV, , *Ước tính và Dự báo HIV/AIDS Ban đầu tại Việt Nam 2011*. 2011.
64. World Health Organization, *Universal health coverage. Report EB132/22 by the secretariat to the WHO Executive Board*, 2013, WHO: Geneva.
65. World Health Organization. *Health financing for universal coverage*. [http://www.who.int/health\\_financing/universal\\_coverage\\_definition/en/index.html](http://www.who.int/health_financing/universal_coverage_definition/en/index.html), accessed on 15/02/2013. 2013.
66. World Health Organization, *Towards Universal Health Coverage: concepts, lessons and public policy challenges. Background document for WHO/World Bank Ministerial-level Meeting on Universal Health Coverage 18-19 February 2013, Geneva* 2013, WHO: Geneva.
67. Bill and Melinda Gates Foundation, et al., *Donor and Technical Partner Meeting on Supporting Countries Pursuing Universal Health Coverage, Meeting Synthesis in Beijing, November 2012*, 2012.
68. Jesse B. Bump, *The Long Road to Universal Health Coverage: A century of lessons for development strategy*, 2010, Rockefeller Foundation: New York.
69. Evans, T., et al., *Thailand's Universal Coverage Scheme: Achievements and Challenges. An independent assessment of the first 10 years (2001-2010) Synthesis Report.*, 2012, Health Insurance System Research Office: Nonthaburi, Thailand.
70. United Nations, *United Nations General Assembly Resolution A/67/L.36: Global Health and Foreign Policy, Sixty-seventh session, 53rd Plenary meeting*, 2012: New York.
71. World Health Organization, *The World Health Report 2008: Primary Health Care: Now More Than Ever*, 2008: Geneva.
72. World Health Organization, *The World Health Report 2010: Health Systems Financing – The Path to Universal Coverage*, 2010: Geneva.
73. Chan, M. *Opening remarks at an informal Member State consultation on health in the post-2015 development agenda*. 2013. 14 December 2012, Geneva, Switzerland.
74. Chan, M., *Opening remarks at a WHO/World Bank ministerial-level meeting on universal health coverage*, 2013: 18 February, Geneva, Switzerland.
75. World Health Organization, *World Health Assembly Resolution 64.9 on Sustainable health financing structures and universal coverage*, 2011: Geneva.
76. Kutzin, J., *Anything goes on the path to universal health coverage?* Bulletin World Health Organization, 2012. **90**: p. 867–868.
77. Figueras, Robinson, and Jakubowski, *Purchasing to improve health systems performance, European Observatory on Health Systems and Policies Series, Open University Press*, 2005.
78. World Health Organization, *The World Health Report 2013: Research for Universal Health Coverage*. 2013, Geneva: WHO.



79. Bộ Chính trị, *Nghị quyết số 46-NQ/TW ngày 23/2/2005 về công tác bảo vệ, chăm sóc và nâng cao sức khỏe nhân dân trong tình hình mới*, 2005: Hà Nội.
80. Bộ Y tế, *Kế hoạch bảo vệ, chăm sóc và nâng cao sức khỏe nhân dân giai đoạn 2011–2015*, 2010: Hà Nội.
81. Thủ tướng Chính phủ, *Quyết định số 538/QĐ-TTg, ngày 29/3/2013, của Thủ tướng Chính phủ “Phê duyệt Đề án thực hiện lộ trình tiến tới bảo hiểm y tế toàn dân giai đoạn 2012 - 2015 và 2020”*, 2013, Văn phòng Chính phủ: Hà Nội.
82. World Health Organization. *Universal Health Coverage: Five Questions*. [http://www.who.int/health\\_financing/universal\\_health\\_coverage\\_5\\_questions.pdf](http://www.who.int/health_financing/universal_health_coverage_5_questions.pdf). 2012.
83. Orvill Adams, *Effective coverage: Conceptual Framework*. International Health Economics Association, 4th World Congress, 2003.
84. Tanahashi T. and *Health Service Coverage and its Evaluation*. Bulletin of the World Health Organization, 1978. **56**(2): p. 295-303.
85. Lungu E., *Health Service Coverage and its Evaluation, Editorial*. Journal of Preventive Medicine, 2007. **15**: p. 3-4.
86. World Health Organization, *Essential Health Packages: What are they for? What do they change?*, 2008: Geneva.
87. Wong, H. and R. Bitran, *Designing a benefits package*. Prepared for the Flagship course on Health sector reform and Sustainable Financing. October, 1999: World Bank Institute.
88. What is public health? <http://www.whatispUBLICHEALTH.org/what/>.
89. Caroline Ramagem and José Ruales, *The Essential Public Health Functions as a Strategy for Improving Overall Health Systems Performance: Trends and Challenges since the Public Health in the Americas Initiative, 2000-2007*, 2008.
90. American Board of Preventive Medicine. <http://www.certificationmatters.org/abms-member-boards/preventive-medicine.aspx>.
91. World Health Organization, *Declaration of Alma-Ata*. Adopted at the International Conference on Primary Health Care, 1978: Alma-Ata, USSR
92. Bộ Y tế, *Quyết định số 4696/QĐ-BYT ngày 27 tháng 11 năm 2008 về Chuẩn Quốc gia các TTYTDP tỉnh/thành phố trực thuộc trung ương*, 2008, Bộ Y tế: Hà Nội.
93. Cục Phòng chống HIV/AIDS, *Báo cáo thực trạng cơ sở vật chất, đầu tư và giải pháp cho các TT phòng chống HIV/AIDS*: Hà Nội.
94. Thủ tướng Chính phủ, *Quyết định số 1256/QĐ-TTg ngày 26/7/2011 của Chính phủ phê duyệt “Đề án tăng cường năng lực Chi cục An toàn vệ sinh thực phẩm các tỉnh, thành phố trực thuộc trung ương”*, 2011: Hà Nội.
95. Cục An toàn thực phẩm, *Báo cáo đánh giá kết quả thực hiện nhiệm vụ năm 2012*, 2013: Hà Nội.
96. Vụ Tổ chức cán bộ, *Báo cáo của Vụ TCCB – Bộ Y tế về thực hiện Thông tư số 03/2008/TTLB-BYT-BNV*: Hà Nội.
97. Viện Chiến lược và Chính sách Y tế, *Báo cáo nghiên cứu Tình hình thực hiện chức năng nhiệm vụ của trạm y tế xã tại 10 tỉnh nghiên cứu*, 2012: Hà Nội.
98. Viện Chiến lược và chính sách Y tế, *Báo cáo đánh giá chi phí hiệu quả can thiệp phòng chống đái tháo đường*, 2010: Hà Nội.
99. Thủ tướng Chính phủ, *Quyết định số 47/2008/QĐ-TTG của Thủ tướng Chính phủ về việc phê duyệt Đề án đầu tư xây dựng, cải tạo, nâng cấp bệnh viện đa khoa huyện và bệnh viện đa khoa khu vực liên huyện sử dụng vốn trái phiếu Chính phủ và các nguồn vốn hợp pháp khác giai đoạn 2008-2010*, 2008, Văn phòng Chính phủ: Hà Nội.
100. Thủ tướng Chính phủ, *Quyết định số 225/2005/QĐ-TTG của Thủ tướng Chính phủ về việc phê duyệt Đề án nâng cấp Bệnh viện huyện và bệnh viện Đa khoa khu vực giai đoạn 2005 - 2008*, 2005, Văn phòng Chính phủ: Hà Nội.
101. Thủ tướng Chính phủ, *Quyết định số 930/QĐ-TTG của Thủ tướng Chính phủ về việc phê duyệt Đề án “Đầu tư xây dựng, cải tạo, nâng cấp các bệnh viện lao, tâm thần, ung bướu, chuyên khoa nhi, truyền nhiễm và một số bệnh viện đa khoa tỉnh thuộc vùng miền núi, khó khăn và sử dụng vốn trái phiếu Chính phủ và các nguồn vốn hợp pháp khác giai đoạn 2009-2013”* 2009, Văn phòng Chính phủ: Hà Nội.
102. Chính phủ, *Nghị định 92/2011/NĐ-CP ngày 17/10/2011 về quy định xử phạt vi phạm hành chính trong lĩnh vực BHYT*, 2011, Văn phòng Chính phủ: Hà Nội.
103. Bộ Y tế, *Quyết định của Bộ trưởng Bộ Y tế số 774/QĐ-BYT về việc phê duyệt Đề án bệnh viện vệ tinh giai đoạn 2013 - 2020*, 2013, Văn phòng Chính phủ: Hà Nội.

104. Thủ tướng Chính phủ, *Quyết định số 14/2013/QĐ-TTg ngày 20/2/2013 của Thủ tướng Chính phủ về việc thực hiện chế độ luân phiên có thời hạn đối với người hành nghề tại cơ sở khám, chữa bệnh*, 2013, Văn phòng Chính phủ: Hà Nội.
105. Bộ Y tế, *Quyết định số 585/QĐ-BYT ngày 20/02/2013 của Bộ trưởng Bộ Y tế về việc phê duyệt Dự án "Thí điểm đưa Bác sỹ trẻ tình nguyện về công tác tại miền núi, vùng sâu, vùng xa, biên giới, hải đảo, vùng có điều kiện kinh tế - xã hội đặc biệt khó khăn (ưu tiên 62 huyện nghèo)"*, 2013, Bộ Y tế: Hà Nội.
106. Thủ tướng Chính phủ, *Quyết định số 319/QĐ-TTg của Thủ tướng Chính phủ về việc phê duyệt Đề án "Khuyến khích đào tạo và phát triển nhân lực y tế các chuyên ngành Lao, Phong, Tâm thần, Pháp y và Giải phẫu bệnh giai đoạn 2013 - 2020"*, 2013, Văn phòng Chính phủ: Hà Nội.
107. Chính phủ, *Nghị định số 56/2011/NĐ-CP ngày 04 tháng 7 năm 2011 của Chính phủ quy định chế độ phụ cấp ưu đãi theo nghề đối với công chức, viên chức công tác tại các cơ sở y tế công lập*, 2011, Văn phòng Chính phủ: Hà Nội.
108. Bộ Y tế, *Thông tư số 07/2013/TT-BYT ngày 08/3/2013 của Bộ Y tế quy định tiêu chuẩn, chức năng, nhiệm vụ của nhân viên y tế thôn, bản*, 2013, Bộ Y tế: Hà Nội.
109. Bộ Y tế and Bộ Tài chính, *Thông tư liên tịch số 04/2012/TTLT-BYT-BTC của Bộ Y tế-Bộ Tài chính về việc Ban hành mức tối đa khung giá một số dịch vụ khám bệnh, chữa bệnh trong các cơ sở khám bệnh, chữa bệnh của Nhà nước*, 2012: Hà Nội.
110. Chính phủ, *Nghị định số 85/2012/NĐ-CP của Chính phủ về cơ chế hoạt động, cơ chế tài chính đối với các đơn vị sự nghiệp y tế công lập và giá dịch vụ khám bệnh, chữa bệnh của các cơ sở khám bệnh, chữa bệnh công lập*, 2012, Văn phòng Chính phủ: Hà Nội.
111. Bộ Y tế, *Chỉ thị 05/CT-BYT về việc tăng cường thực hiện giải pháp nâng cao chất lượng khám, chữa bệnh sau khi điều chỉnh giá dịch vụ y tế 2012*, Bộ Y tế: Hà Nội.
112. Bộ Y tế, *Thông tư số 01/2013/TT-BYT của Bộ Y tế về việc hướng dẫn thực hiện quản lý chất lượng xét nghiệm tại cơ sở khám bệnh, chữa bệnh*, 2013, Bộ Y tế: Hà Nội.
113. World Health Organization, *World health statistics 2012*, 2012, WHO: Geneva.
114. Cục Quản lý Khám chữa bệnh, *Báo cáo kết quả công tác khám, chữa bệnh năm 2012 và những nhiệm vụ trọng tâm của công tác khám, chữa bệnh năm 2013*, 2013: Hà Nội.
115. Viện Chiến lược và Chính sách Y tế, *Đánh giá bước đầu việc triển khai khám chữa bệnh bảo hiểm y tế tại trạm y tế xã theo quy định của Luật Bảo hiểm y tế*, 2011: Hà Nội.
116. Bộ Y tế, *Báo cáo tổng kết 10 năm thực hiện Chỉ thị 06/CT-TW ngày 22/01/2002 của Ban Chấp hành Trung ương về củng cố và hoàn thiện mạng lưới y tế cơ sở*, 2012, Bộ Y tế: Hà Nội.
117. Trần Chí Liêm, Võ Thành Đông, and Lê Ngọc Chính, *Đánh giá 10 năm triển khai thực hiện Chỉ thị 06/CT-TW và đề xuất giải pháp củng cố và hoàn thiện mạng lưới y tế cơ sở trong thời gian tới*. Tạp chí Chính sách y tế, 2012. **10/2012**.
118. Phạm Huy Tuấn Kiệt and Nguyễn Phương Hoa, *Năng lực thực hiện thủ thuật cấp cứu, chống độc, nội khoa và nhi khoa giữa trạm y tế xã/phường có và không có bác sĩ tốt nghiệp chuyên khoa 1 y học gia đình*. Tạp chí nghiên cứu y học, 2012. **Phụ trương 80 (3B)**: p. 313-317.
119. Nguyễn Phương Hoa and Phạm Huy Tuấn Kiệt, *Đánh giá của bệnh nhân về chất lượng khám chữa bệnh của bác sĩ gia đình và bác sĩ đa khoa tại y tế cơ sở và nhu cầu chăm sóc sức khỏe*. Tạp chí nghiên cứu y học, 2012. **Phụ trương 80 (3C)**: p. 374-380.
120. Hoang Van Minh, et al., *Describing the primary care system capacity for the prevention and management of non-communicable diseases in rural Vietnam (Accepted)*. International Journal of Health Planning and Management, 2013. doi: **10.1002/hpm.2179**.
121. Cục Quản lý khám chữa bệnh, *Báo cáo khảo sát thực trạng triển khai quản lý chất lượng dịch vụ khám chữa bệnh tại các bệnh viện*, Cục Quản lý khám chữa bệnh, Hà Nội tháng 10 năm 2012. 2012.
122. Bộ Y tế, *Quyết định số 23/2005/QĐ-BYT của Bộ Y tế về việc ban hành Quy định Phân tuyến kỹ thuật và Danh mục kỹ thuật trong khám chữa bệnh*, 2005, Bộ Y tế: Hà Nội.
123. Cục Quản lý Khám chữa bệnh, *Báo cáo kết quả công tác khám, chữa bệnh năm 2011 và những giải pháp nâng cao chất lượng khám, chữa bệnh năm 2012*. Báo cáo số 267/BC-KCB, 2012: Hà Nội.
124. Bộ Y tế, *Báo cáo đánh giá 3 năm thực hiện Luật BHYT và đề xuất sửa đổi, bổ sung một số điều của Luật BHYT*, 2013, Bộ Y tế: Hà Nội.
125. World Health Organization. *Universal Health Coverage. What is universal health coverage?* [http://www.who.int/universal\\_health\\_coverage/en/index.html](http://www.who.int/universal_health_coverage/en/index.html).



126. Management Science for Health, *Putting Access to Medicines at the Center of Universal Health Coverage: A Conversation with Dr. Douglas Keene*. <http://www.msh.org/news-bureau/profile-douglas-keene.cfm>, in Management Science for Health.
127. United Nations, *Millennium Development Goal 8: The Global Partnership for Development: Making Rhetoric a Reality*, in MDG Gap Task Force Report 2012: New York.
128. World Health Organization, *Medicines prices, availability and affordability, World Medicine Situation 2011*. 2011: Geneva.
129. Bộ Y tế, *Quyết định số 05/2008/QĐ-BYT về việc ban hành danh mục thuốc chữa bệnh chủ yếu sử dụng tại các cơ sở khám bệnh, chữa bệnh* 2008, Bộ Y tế: Hà Nội.
130. Chính phủ, *Nghị Quyết số 37/CP ngày 20/6/1996 của Chính phủ Về định hướng chiến lược công tác chăm sóc sức khỏe nhân dân trong thời gian 1996-2000 và chính sách quốc gia của Việt Nam*, 1996, Văn phòng Chính phủ: Hà Nội.
131. Bộ Y tế, *Dự thảo chính sách quốc gia về Dược giai đoạn 2011-2020, tầm nhìn 2030*, 2011, Bộ Y tế: Hà Nội.
132. Bộ Y tế, *Báo cáo nhân lực của các Sở Y tế*, 2011, Bộ Y tế: Hà Nội.
133. Trương Quốc Cường. *Bài trình bày tại khóa học Đổi mới hệ thống y tế và tài chính y tế tại Quảng Ninh 4/2011*. 2011.
134. Nguyễn Thị Kim Chúc and Trần Khánh Toàn, *Đánh giá tình hình thực hiện chính sách quốc gia về thuốc tại Việt Nam từ 1996-2004. Báo cáo nghiên cứu trong khuôn khổ Chương trình Hợp tác Y tế Việt Nam - Thụy Điển*, 2005: Hà Nội.
135. Trần Thị Thoa, et al., *Thực trạng tồn trữ thuốc ở các hộ gia đình tại hai xã Thiệu Long và Cẩm Bình tỉnh Thanh Hóa*. Tạp chí Dược học 2011. **424**: p. 14-18.
136. World Health Organization, *Measuring medicine prices, availability, affordability and price components*, 2008, WHO: Geneva.
137. Quốc hội nước CHXHCN Việt Nam, *Luật Dược*, 2005.
138. Tran Thi Mai Oanh and et al., *Assessment of health system performance in six provinces of Vietnam*, 2010: Hanoi.
139. Trần Thị Thoa, et al., *Nghiên cứu thực trạng tiếp cận thuốc, thuốc thiết yếu tại một số trạm y tế xã thuộc 24 tỉnh*. Tạp chí Nghiên cứu y học, 2010. **70**: p. 73-79.
140. Oxfam, *Putting public health at risk: US proposals under the Trans Pacific Partnership Agreement (TPPA) to exacerbate Vietnam's access to medicines crisis*. Oxfam Media Briefing No. 05/2013, 4 March 2013. <http://www.oxfam.org/sites/www.oxfam.org/files/vietnam-trans-pacific-partnership-agreement-oxfam-mb-040313.pdf> 2013.
141. Bộ Y tế and Tổng cục Thống kê, *Báo cáo kết quả điều tra y tế quốc gia 2001-2002*, 2003: Hà Nội.
142. Nguyen Quynh Hoa, *High antibiotic use and resistance among children under five : Acute respiratory infections: knowledge and behaviour of caregivers and healthcare providers in Vietnam*, in *Public Health* 2010, Karolinska Institutet: Stockholm.
143. Thi Hoan Le, Ellinor Ottosson, and Thi Kim Chuc Nguyen, *Drug use and self-medication among children with respiratory illness or diarrhea in a rural district in Vietnam: a qualitative study*. Journal of Multidisciplinary Healthcare, 2011. **2011**(4): p. 329 – 336.
144. Trần Thị Thoa, *Luận án Tiến sĩ “Nghiên cứu thực trạng và tính công bằng trong tiếp cận và sử dụng thuốc, thuốc thiết yếu tại tuyến xã”*. , 2011, Trường Đại học Dược Hà Nội.
145. Nguyễn Trần Thị Giáng Hương, *Báo cáo kết quả nghiên cứu đề tài cấp Bộ “Nghiên cứu tính bất hợp lý trong chỉ định thuốc và đề xuất nâng cao tính hợp lý trong sử dụng thuốc tại một số bệnh viện ở miền Bắc, Việt Nam*, 2010, Bộ y tế: Hà Nội.
146. Escalante, S., *The use of medicines in Vietnam*, 2012, WHO: Hà Nội.
147. Nguyen Anh Tuan, *Medicine prices, availability and affordability*. Southern Medical Review, 2009. **2**.
148. Trúc Linh *Xử lý nghiêm việc chi hoa hồng cho bác sĩ*. Báo Hà Nội mới 2013.
149. Xu, K., et al., *Household catastrophic health expenditure: a multicountry analysis*. Lancet, 2003. **362**(9378): p. 111-7.
150. World Health Organization, *Distribution of health payments and catastrophic expenditures methodology*, 2005, WHO: Geneva.
151. World Bank. *Indicator*. <http://data.worldbank.org/indicator>.
152. World Health Organization, *Health financing strategy in Asia – Pacific region (2010-2015)*, 2009, WHO: Geneva.
153. Kawabata, K., K. Xu, and G. Carrin, *Preventing impoverishment through protection against catastrophic health expenditure*. Bulletin of the World Health Organization, 2002. **80**(8): p. 612.

154. Tangcharoensathien, V., et al., *Health-financing reforms in southeast Asia: challenges in achieving universal coverage*. Lancet, 2011. **377**(9768): p. 863-73.
155. Hoang Van Minh, Nguyen Thi Kim Phuong, and Priyanka Saksena, *Research report : Assessment of financial protection in the Vietnam Health System: Analyses of Vietnam Living Standards Survey Data 2002--2010*, 2012: Hanoi.
156. Van Minh, H., et al., *Financial burden of household out-of pocket health expenditure in Viet Nam: Findings from the National Living Standard Survey 2002-2010*. Social science & medicine, 2012.
157. World Health Organization, *World Health Organization- Regional Office for Western Pacific, The Cambodian demographic health survey and Cambodian socio-economic surveys: Analysis report*, 2011, WHO: Manila.
158. World Health Organization - Regional Office for Western Pacific, *Financial burden from household expenditures and Health facility utilization in Lao PDR*, 2011, WHO: Manila.
159. World Health Organization - Regional Office for Western Pacific, *Financial Burden of Health Payments in the Philippines*, 2011, WHO: Manila.
160. van Doorslaer, E., et al., *Catastrophic payments for health care in Asia*. Health economics, 2007. **16**(11): p. 1159-84.
161. van Doorslaer, E., et al., *Effect of payments for health care on poverty estimates in 11 countries in Asia: an analysis of household survey data*. Lancet, 2006. **368**(9544): p. 1357-64.
162. Van Minh, H. and B. Xuan Tran, *Assessing the household financial burden associated with the chronic non-communicable diseases in a rural district of Vietnam*. Global health action, 2012. **5**: p. 1-7.
163. Trường Đại học Y tế công cộng, *Đánh giá gánh nặng kinh tế của ung thư tại Việt Nam*, 2012: Hà Nội.
164. Sepehri, A., S. Sarma, and W. Simpson, *Does non-profit health insurance reduce financial burden? Evidence from the Vietnam Living Standards Survey Panel*. Health economics, 2006. **15**(6): p. 603-16.
165. Samuel S. Lieberman and Adam Wagstaff, *Health Financing and Delivery in Vietnam: The Short- and Medium-Term Policy Agenda*, 2008, World Bank: Hà Nội.
166. O'Donnell, O., et al., *Who benefits from public spending on health care in Asia? EQUITAP Project*, 2005.
167. Wagstaff A, *Health insurance for the poor: initial impacts of Vietnam's health care fund for the poor, in Policy Research Working Paper # WPS 41342007*, 2007, World Bank: Washington DC.
168. Wagstaff A and Pradhan M, *Health insurance impacts on health and nonmedical consumption in a developing country. WPS 3563*, 2005, 2005, World Bank.
169. Wagstaff, A. and E. van Doorslaer, *Catastrophe and impoverishment in paying for health care: with applications to Vietnam 1993-1998*. Health economics, 2003. **12**(11): p. 921-34.
170. Sepehri, A., S. Sarma, and J. Serieux, *Who is giving up the free lunch? The insured patients' decision to access health insurance benefits and its determinants: Evidence from a low-income country*. Health policy, 2009. **92**(2-3): p. 250-8.
171. Sepehri, A., R. Chernomas, and A.H. Akram-Lodhi, *If they get sick, they are in trouble: health care restructuring, user charges, and equity in Vietnam*. International journal of health services : planning, administration, evaluation, 2003. **33**(1): p. 137-61.
172. Health Strategy and Policy Institute, *Report on survey of the implementation of Decree 43/2006/ND-CP in public hospitals [Báo cáo khảo sát tình hình thực hiện Nghị định 43/2006/NĐ-CP trong hệ thống bệnh viện công lập.]* 2010: Hanoi.
173. Dương Huy Liệu et al, *Các giải pháp tài chính hỗ trợ người nghèo*. 2006 Hà Nội: Nhà xuất bản Y học.
174. Thủ tướng Chính phủ, *Quyết định số 135/1998/QĐ-TTg ngày 31/7/1998 của Thủ tướng Chính phủ phê duyệt Chương trình phát triển kinh tế - xã hội các xã đặc biệt khó khăn miền núi, vùng sâu, vùng xa*, 1998, Văn phòng Chính phủ: Hà Nội.
175. Thủ tướng Chính phủ, *Quyết định số 168/2001/QĐ-TTg, ngày 30/10/2001 của Thủ tướng Chính phủ về việc định hướng dài, kế hoạch 5 năm 2001 - 2005 và những giải pháp cơ bản phát triển kinh tế xã hội vùng Tây Nguyên*, 2001, Văn phòng Chính phủ: Hà Nội.
176. Thủ tướng Chính phủ, *Quyết định số 186/2001/QĐ-TTg của Thủ tướng Chính phủ về phát triển kinh tế-xã hội ở 6 tỉnh đặc biệt khó khăn miền núi phía Bắc thời kỳ 2001-2005*, 2001, Văn phòng Chính phủ: Hà Nội.

177. Báo điện tử Chính phủ, *Quy định hỗ trợ chi phí khám chữa bệnh cho người nghèo*. <http://baodientu.chinhphu.vn/Home/Quy-dinh-ho-tro-chi-phi-kham-chua-benh-cho-nguoi-ngheo/20131/160107.vgp>, in Báo điện tử Chính phủ 2013.
178. Bộ Lao động - Thương binh và xã hội, *Quyết định số 375/QĐ-LĐTBXH phê duyệt kết quả điều tra khảo sát hộ nghèo, hộ cận nghèo năm 2011*, Bộ LĐ-TBXH: Hà Nội.
179. Bộ Tài chính, *Thông tư 26/2005/TT-BTC hướng dẫn quản lý, sử dụng và quyết toán kinh phí khám bệnh, chữa bệnh cho trẻ em dưới sáu tuổi không phải trả tiền tại các cơ sở y tế công lập*, 2005: Hà Nội.
180. L. Anh Sẻ cấp thẻ Bảo hiểm y tế cho trẻ dưới 6 tuổi. Báo Tuổi trẻ online, 2006.
181. Thủ tướng Chính phủ, *Quyết định 1781/QĐ-TTg năm 2012 phê duyệt Chương trình hành động quốc gia về người cao tuổi Việt Nam giai đoạn 2012-2020*, 2012: Hà Nội.
182. Chính phủ, *Nghị quyết 05/2005/NQ-CP của Chính phủ "Về đẩy mạnh xã hội hoá các hoạt động giáo dục, y tế, văn hoá và thể dục thể thao"*, 2005.
183. Chính phủ, *Nghị quyết 40/NQ-CP năm 2012 về Chương trình hành động thực hiện Thông báo kết luận của Bộ Chính trị về Đề án "Đổi mới cơ chế hoạt động của đơn vị sự nghiệp công lập, đẩy mạnh xã hội hóa loại hình dịch vụ sự nghiệp công"* 2012, Văn phòng Chính phủ: Hà Nội.
184. Axelson, H., et al., *Health financing for the poor produces promising short-term effects on utilization and out-of-pocket expenditure: evidence from Vietnam*. International journal for equity in health, 2009. **8**: p. 20.
185. Bales, S., et al., *The Early Impact of Decision 139 in Vietnam: An Application of Propensity Score Matching. Report to the Ministry of Health of Vietnam*, 2007, Health Strategy and Policy Institute: Hanoi.
186. Thanh, N.X., et al., *An assessment of the implementation of the Health Care Funds for the Poor policy in rural Vietnam*. Health policy, 2010. **98**(1): p. 58-64.
187. Wagstaff, A., *Estimating health insurance impacts under unobserved heterogeneity: the case of Vietnam's health care fund for the poor*. Health economics, 2010. **19**(2): p. 189-208.
188. Dam Viet Cuong et. al, *Healthcare for the poor in five provinces in the northern uplands and central highlands*, 2009.
189. Đặng Bội Hương, Bales S, and Knowles J, *Kết quả từ một điều tra tuyến tính về khám chữa bệnh cho đối tượng của QĐ 139 về khám chữa bệnh cho người nghèo*, 2008.
190. Hùng PM and Trần Tuấn, *Những vấn đề rút ra từ nghiên cứu phân tích việc thực hiện Quyết định 139 và Quyết định 3310*, 2006.
191. Bảo hiểm xã hội Việt Nam, *Báo cáo đánh giá thực hiện BHYT cho người thuộc hộ nghèo (Ban hành kèm theo Công văn số 401/BHXH-CSYT ngày 21/1/2013)*, 2013, BHXH Việt Nam: Hà Nội.
192. Vụ Bảo hiểm Y tế, *Một số bài luận về quyền lợi của người nghèo, cận nghèo và thách thức về công bằng trong tiếp cận dịch vụ KCB bảo hiểm y tế*, 2013.
193. Aparnaa Somanathan, Huong Lan Dao, and Tran Van Tien, *Integrating the Poor into Universal Health Coverage in Vietnam*, 2013, World Bank.
194. Đặng Bội Hương, *Tăng cường khả năng tiếp cận và sử dụng dịch vụ khám chữa bệnh tại tuyến y tế cơ sở của dân cư nông thôn Việt Nam. Bản thảo luận án Tiến sĩ, Chuyên ngành: Kinh tế phát triển*, 2009, Đại học kinh tế quốc dân: Hà Nội.
195. Nguyen, K.T., et al., *Coping with health care expenses among poor households: evidence from a rural commune in Vietnam*. Social science & medicine, 2012. **74**(5): p. 724-33.
196. Bộ Y tế and N.đ.t.y. tế, *Báo cáo chung tổng quan ngành y tế năm 2008: Tài chính Y tế Việt Nam*, 2008, Bộ Y tế: Hà Nội.
197. Nguyen, H. and W. Wang, *The effects of free government health insurance among small children-evidence from the free care for children under six policy in Vietnam*. The International journal of health planning and management, 2013. **28**(1): p. 3-15.
198. Ngo Thi Khanh et.al., *KAP study on the obtainment and use of health insurance card for children under 6 years old in Dien Bien, Kon Tum, Ninh Thuan and Ho Chi Minh city*, 2012: Hanoi.
199. Đàm Viết Cường và cộng sự. *Báo cáo công tác quản lý các hoạt động KCB cho trẻ em dưới 6 tuổi tại ba tỉnh Ninh Bình, Đà Nẵng, Tiền Giang. Trình bày tại Hội thảo quản lý các dịch vụ y tế công tư trong KCB cho trẻ em. Đà Nẵng 1/6/2006*. 2006.
200. Knowles J.C and Bales S. và cộng sự, *Health equity in Viet Nam: A situational analysis focused on maternal and child mortality*, 2008.



201. Phạm Thắng and Đỗ Thị Khánh Hỷ, *Báo cáo tổng quan về chính sách chăm sóc người già thích ứng với thay đổi cơ cấu tuổi tại Việt Nam*, 2009, Tổng cục dân số kế hoạch hóa gia đình.
202. Nguyễn Thị Trang Nhung, et al., *Gánh nặng bệnh tật và chấn thương ở Việt Nam*, 2011, Trường Đại học y tế công cộng, : Hà Nội.
203. Thục Quyên, *Đánh giá 2 năm thực hiện Luật Người cao tuổi: 1,43 triệu người cao tuổi được hưởng trợ cấp xã hội, ngày 22/01/2013*, in *Tạp chí Lao động và xã hội online* 2013: Hà Nội.
204. Thanh, N.X. and L. Lindholm, *Has Vietnam Health care funds for the poor policy favored the elderly poor?* BMC Health Services Research, 2012. **12**: p. 333.
205. Trung ương Hội liên hiệp phụ nữ Việt Nam, Trung ương Hội Người cao tuổi Việt Nam, and Trung tâm Hỗ trợ Người cao tuổi và Phát triển cộng đồng, *Điều tra về người cao tuổi Việt Nam, năm 2011: Các kết quả chủ yếu*, 2012.
206. UNFPA, *Người khuyết tật ở Việt Nam: Một số kết quả chủ yếu từ Tổng điều tra Dân số và Nhà ở Việt Nam 2009*, 2011, UNFPA: Hà Nội.
207. Hoang Van Minh et. al, *Disability and poverty in Vietnam: The extra cost of living with disability. Manuscript submitted*. Bulletin of World Health Organization, 2013.
208. UNICEF and MOLISA, *Situational Analysis of Children with Disabilities in Vietnam*, 2004: Hà Nội.
209. MOLISA and UNICEF, *Creating a protective environment for children in Vietnam: An assessment of child protection laws and policies, especially children in special circumstances in Vietnam*, 2009: Hanoi.
210. Lê Bạch Dương và cộng sự, *Người tàn tật ở Việt Nam: kết quả của một điều tra xã hội học ở Thái Bình, Quảng Nam, Đà Nẵng và Đồng Nai*, 2008: Hà Nội.
211. Michael G. Palmer, et al., *Disability measures as an indicator of poverty: A case study from Viet Nam*. Journal of International Development, 2010. **24**(Suppl (S1)): p. S53-S68.
212. UNDP, *Dịch vụ xã hội phục vụ phát triển con người - Báo cáo Quốc gia về Phát triển Con người năm 2011*, 2011: Hà Nội.
213. UNDP, *Di cư trong nước: Cơ hội và thách thức đối với sự phát triển kinh tế - xã hội ở Việt Nam: Kêu gọi hành động*, 2010: Hà Nội.
214. Actionaid, UKaid, and Oxfam, *Giảm nghèo đô thị tại Việt Nam: Thách thức mới, cách tiếp cận mới: Tóm tắt kết quả chính của Dự án Theo dõi Nghèo Đô thị 2008-2012*, 2012: Hà Nội.
215. Lê Thị Kim Ánh, Phạm Thị Lan Liên, and Nguyễn Tuấn Hưng, *Người lao động di cư đến các khu công nghiệp: Điều kiện sống, sinh hoạt và tình hình sử dụng dịch vụ y tế*. Tạp chí Y học thực hành, 2011. **5** (764).
216. Le Bach Duong, Tran Giang Linh, and Nguyen Thi Phuong Thao, *Social protection for urban-rural migrant in Vietnam: Current Situation Challenges and Opportunities*. Institute of Development Studies & Centre for Social Protection, 2011: Hà Nội.
217. Bộ Y tế and Nhóm đối tác y tế, *Báo cáo chung tổng quan ngành Y tế năm 2011: Nâng cao năng lực quản lý, đổi mới tài chính y tế để thực hiện kế hoạch 5 năm ngành y tế 2011-2015*, 2011, Bộ Y tế: Hà Nội.
218. Dự án hỗ trợ chăm sóc sức khỏe cho người nghèo các tỉnh miền núi phía Bắc và Tây Nguyên (HEMA), *Báo cáo cuối kỳ dự án Thí điểm mô hình quản lý bệnh hen phế quản dựa vào cộng đồng*, 2012.
219. Bộ Y tế, *Báo cáo tổng hợp của Vụ Kế hoạch - Tài chính*, 2012: Hà Nội.
220. Thủ tướng Chính phủ, *Quyết định số 164/2006/QĐ-TTG của Thủ tướng Chính phủ về việc phê duyệt danh sách xã đặc biệt khó khăn, xã biên giới, xã an toàn khu vào diện đầu tư Chương trình phát triển kinh tế - xã hội các xã đặc biệt khó khăn vùng đồng bào dân tộc và miền núi giai đoạn 2006 - 2010 (Chương trình 135 giai đoạn II)*, 2006, Văn phòng Chính phủ: Hà Nội.
221. Chính phủ, *Nghị quyết số 30/a/2008/NQ-CP của Chính phủ về Chương trình hỗ trợ giảm nghèo nhanh và bền vững đối với 61 huyện nghèo*, 2008, Văn phòng Chính phủ: Hà Nội.
222. UNDP, *Tác động của chương trình 135 giai đoạn II qua lăng kính hai cuộc điều tra đầu kỳ và cuối kỳ*, 2012: Hà Nội.
223. Pablo Gottret and George Schieber, *Health Financing Revisited*, 2006, The World Bank.
224. Bộ Y tế, *Báo cáo Kết quả nghiên cứu Khả năng thực hiện BHYT toàn dân*, 2011: Hà Nội, tháng 2.
225. Quốc hội nước CHXHCN Việt Nam, *Luật Thanh tra, số 22/2004/QH11*, 2004, Văn phòng Quốc hội.
226. Tran Van Tien, et al., *A health financing review of Vietnam with a focus on social health insurance*, 2011, WHO: Geneva.

227. World Health Organization, *Global Health Expenditure* <http://apps.who.int/nha/database/PreDataExplorer.aspx?d=1>, accessed 2013.
228. Mexican Commission on Macroeconomics and Health, *Investing in health for economic development. Commission report*, 2004.
229. Bộ Tài chính, *Thông tư 107/2006/TT-BTC hướng dẫn một số điểm về tổ chức thực hiện dự toán ngân sách Nhà nước năm 2007*, 2007: Hà Nội.
230. Viện Chiến lược và Chính sách Y tế, *Báo cáo kết quả nghiên cứu Phân tích chi phí hiệu quả các can thiệp phòng chống tác hại thuốc lá tại Việt Nam*, 2009: Hà Nội.
231. Trường Đại học Y tế công cộng, *Giáo trình Kinh tế Y tế*. 2008, Hà Nội.
232. Atlantic, T., *How the U.S. Health-Care System Wastes \$750 Billion Annually*. <http://www.theatlantic.com/health/archive/2012/09/how-the-us-health-care-system-wastes-750-billion-annually/262106/>, accessed 2013.
233. Marc J Roberts, et al., *Getting Health Reform Right: A Guide to Improving Performance and Equity*. 2008, New York: Oxford University Press.
234. Chính phủ, *Nghị định 95-CP ngày 27-8-1994 về việc thu một phần viện phí*, 1994, Văn phòng Chính phủ: Hà Nội.
235. Hjortsberg C, *Why do the sick not utilise health care? The case of Zambia*. Health economics, 2003. **12**: p. 755-70.
236. Preker A, Langenbrunner J, and Jakab M, *Rich-poor differences in health care financing*. In: Dror D, Preker A, eds. *Social re-insurance - a new approach to sustainable community health care financing*. , 2002, The World Bank: Washington DC.
237. Bảo hiểm xã hội Việt Nam, *Báo cáo sơ kết 02 năm thực hiện phương thức thanh toán theo định suất*, 2012: Hà Nội.
238. Trần Duy Thông, *Nghiên cứu ảnh hưởng của phương thức thanh toán định suất đến chi phí và một số chỉ số khám chữa bệnh*. Kỷ yếu Hội nghị khoa học kinh tế y tế lần thứ hai: Tài chính y tế hướng tới chăm sóc sức khỏe toàn dân, 2012: p. 91-106.
239. Chính phủ, *Nghị định số 64/2009/NĐ-CP của Thủ tướng Chính phủ về chính sách đối với cán bộ, viên chức y tế công tác ở vùng có điều kiện kinh tế - xã hội đặc biệt khó khăn*, 2009: Hà Nội.
240. Thủ tướng Chính phủ, *Quyết định 46/2009/QĐ-TTG quy định chế độ phụ cấp đặc thù đối với cán bộ, viên chức công tác tại Bệnh viện Hữu Nghị, Bệnh viện Thống Nhất, Bệnh viện C Đà Nẵng thuộc Bộ Y tế, các Phòng Bảo vệ sức khỏe Trung ương 1, 2, 2B, 3 và 5, Khoa A11 Bệnh viện Trung ương Quân đội 108 và Khoa A11 Viện Y học cổ truyền Quân đội*, 2009, Văn phòng Chính phủ: Hà Nội.
241. Thủ tướng Chính phủ, *Quyết định số 75/2009/QĐ-TTG của Thủ tướng Chính phủ : Về việc quy định chế độ phụ cấp đối với nhân viên y tế thôn, bản*, 2009: Hà Nội.
242. Thủ tướng Chính phủ, *Quyết định 59/2010/QĐ-TTg ban hành Định mức phân bổ dự toán chi thường xuyên ngân sách nhà nước năm 2011*, 2010: Hà Nội.
243. Berenson, R.A. and E.C. Rich, *US approaches to physician payment: the deconstruction of primary care*. Journal of general internal medicine, 2010. **25**(6): p. 613-8.