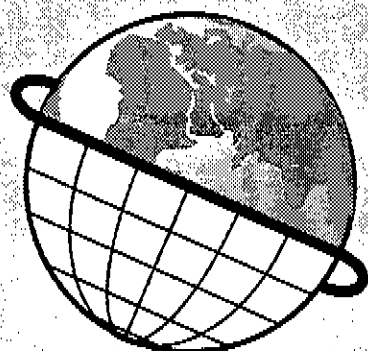


**"Macroeconomics,
Health and
Development" Series**



Number 23

WHO/COME/80.23
Original: English
Distribution: Limited

The Development of National Health Insurance in Viet Nam

Viet Nam

Technical Paper



**World Health Organization
Geneva, October 1993**

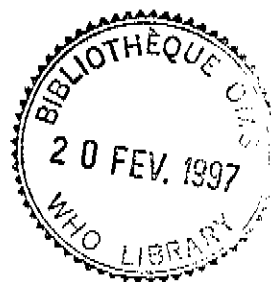
Other titles in the "Macroeconomics, Health and Development" Series are:

- N° 1: Macroeconomic Evolution and the Health Sector: Guinea, Country Paper - WHO/ICO/MESD.1
- N° 2: Une méthodologie pour le calcul des coûts des soins de santé et leur recouvrement: Document technique, Guinée - WHO/ICO/MESD.2
- N° 3: Debt for Health Swaps: A source of additional finance for the health system: Technical Paper - WHO/ICO/MESD.3
- N° 4: Macroeconomic Adjustment and Health: A survey: Technical Paper - WHO/ICO/MESD.4
- N° 5: La place de l'aide extérieure dans le secteur médical au Tchad: Etude de pays, Tchad - WHO/ICO/MESD.5
- N° 6: L'influence de la participation financière des populations sur la demande de soins de santé: Une aide à la réflexion pour les pays les plus démunis: Principes directeurs - WHO/ICO/MESD.6
- N° 7: Planning and Implementing Health Insurance in Developing countries: Guidelines and Case Studies: Guiding Principles - WHO/ICO/MESD.7
- N° 8: macroeconomic Changes in the Health Sector in Guinea-Bissau: Country Paper - WHO/ICO/MESD.8
- N° 9: Macroeconomic Development and the Health Sector in Malawi: Country Paper - WHO/ICO/MESD.9
- N° 10: El ajuste macroeconómico y sus repercusiones en el sector de la salud de Bolivia: Documento de país - WHO/ICO/MESD.10
- N° 11: The macroeconomy and Health Sector Financing in Nepal: A medium-term perspective: Nepal, Country Paper - WHO/ICO/MESD.11
- N° 12: Towards a Framework for Health Insurance Development in Hai Phong, Viet Nam: Technical Paper - WHO/ICO/MESD.12
- N° 13: Guide pour la conduite d'un processus de Table ronde sectorielle sur la santé: Principes directeurs - WHO/ICO/MESD.13
- N° 14: The public health sector in Mozambique: A post-war strategy for rehabilitation and sustained development: Country paper - WHO/ICO/MESD.14
- N° 15: La santé dans les pays de la zone franc face à la dévaluation du franc CFA - WHO/ICO/MESD.15 (document no longer available)
- N° 16: Poverty and health in developing countries: Technical Paper - WHO/ICO/MESD.16
- N° 17: Gasto nacional y financiamiento del sector salud en Bolivia: Documento de país - WHO/ICO/MESD.17
- N° 18: Exploring the health impact of economic growth, poverty reduction and public health expenditure - Technical paper - WHO/ICO/MESD.18
- N° 19: A community health insurance scheme in the Philippines: extension of a community based integrated project. Philippines - Technical paper - WHO/ICO/MESD.19
- N° 20: The reform of the rural cooperative medical system in the People's Republic of China, initial design and interim experience - Technical paper - WHO/ICO/MESD.20
- N° 21: Un modèle de simulation des besoins financiers et des possibilités budgétaires de l'Etat pour le fonctionnement du système de santé - Document technique - WHO/ICO/MESD.21
- N° 22: Un indice synthétique peut-il être un guide pour l'action ? - Document technique - WHO/ICO/MESD.22

The Development of National Health Insurance in Viet Nam

by

Aviva Ron *Guy* and Carrin
Health Services Development Programme
World Health Organization,
Geneva



ACKNOWLEDGEMENTS

The paper is based on reports of missions and studies carried out through the Intensified WHO Cooperation with Viet Nam, in providing support to the development of health insurance as a national health care financing method. The authors appreciated the opportunity to work with the national counterparts in the Ministry of Health and the Viet Nam Health Insurance, and thank all involved for their efforts in planning and implementing the many activities and in carrying out the studies. We would like to acknowledge especially the collaboration with Bui Duc Khanh, Nghiem Tran Dung, Do Duy Hien and Nguyen Quang An of the Ministry of Health and Khac Long and Tran Van Tien of the Viet Nam Health Insurance.

Many thanks are due to WPRO and to Dr G. Cuboni, WHO Representative in Viet Nam, for their interest and support. Sincere thanks are due to the Government of France, the Swedish International Development Agency and the Government of Luxembourg for their financial support to the work.

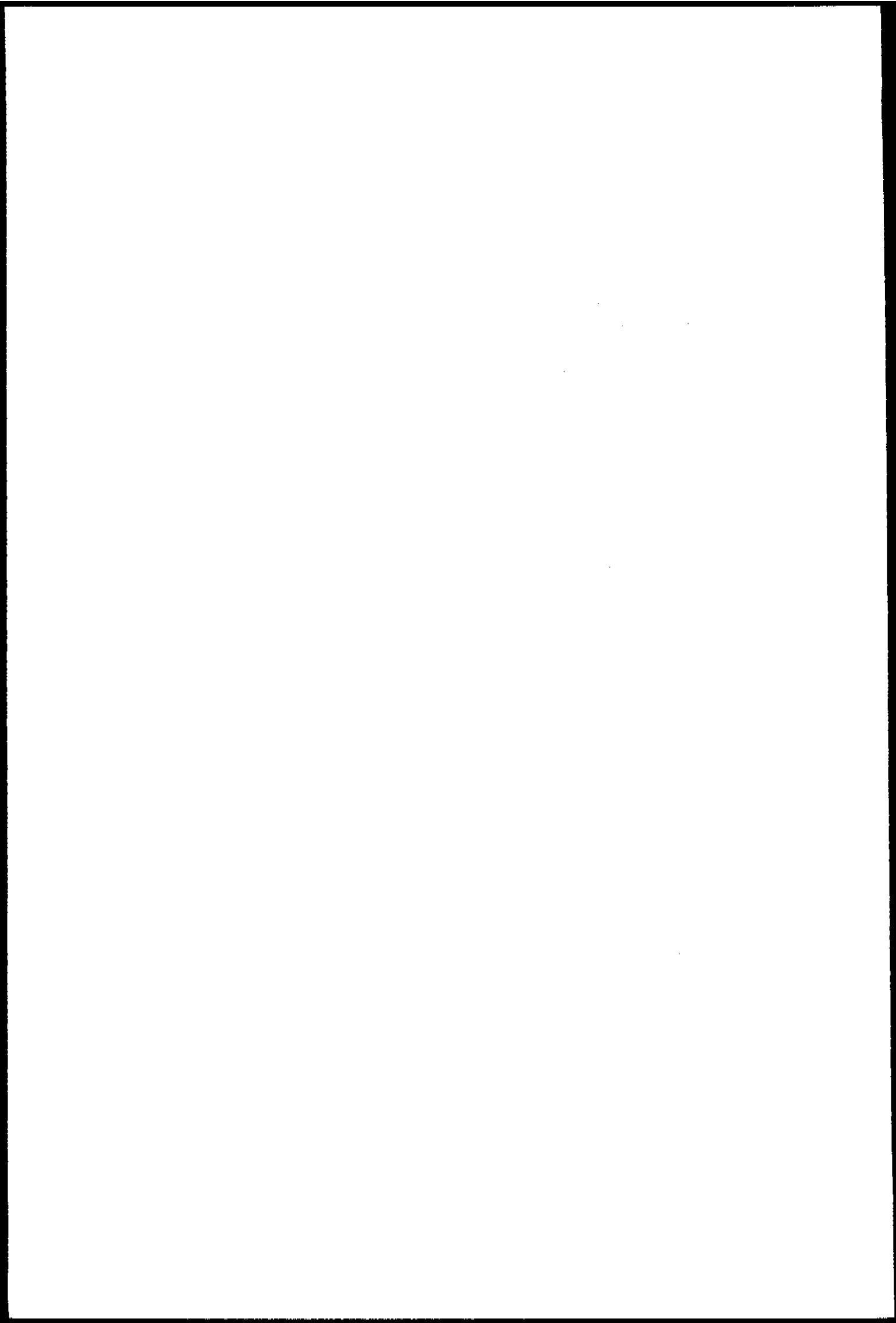
This document is not issued to the general public, and all rights are reserved by the World Health Organization (WHO). The document may not be reviewed, abstracted, quoted, reproduced or translated, in part or in whole, without the prior written permission of WHO. No part of this document may be stored in a retrieval system or transmitted in any form or by any means - electronic, mechanical or other - without the prior written permission of WHO.

The views expressed in documents by named authors are solely the responsibility of these authors.

Printed in 1996 by WHO
Printed in Switzerland

CONTENTS

| | Pages |
|--|-------|
| 1. Introduction | 1 |
| 2. The Ministry of Health/WHO Project on Health Insurance Development | |
| 2.1 Background of the Project | 1 |
| 2.2 Activities carried out | 3 |
| 3. Development from 1992 to 1996 | |
| 3.1 Target population | |
| 3.1.1 Development between 1992-1995 | 6 |
| 3.1.2 Health insurance membership in mid-1996 | 8 |
| 3.1.3 Further efforts to extend membership | 9 |
| 3.2 Contributions to compulsory and voluntary insurance | 11 |
| 3.3 Health insurance benefits | 12 |
| 3.4 Use of health insurance revenues | 13 |
| 3.5 Provider payment methods | 14 |
| 3.6 Administration of health insurance | 18 |
| 3.7 Future locus of responsibility | 19 |
| 3.8 Health and health system development | 20 |
| 4. Results of Studies | |
| 4.1 Cost analysis | 22 |
| 4.2 Health services by the insured and non-insured: utilization and costs | 24 |
| 4.3 Development of health insurance in Hai Phong | 26 |
| 5. Framework for the Future Development of Health Insurance in Viet Nam | 28 |
| 6. Conclusions | 32 |
| Bibliography | 34 |



1. INTRODUCTION

Viet Nam, with a population of over 70 million, shows a conflicting series of health and development indicators. On the positive side, infant and under-five mortality rates are relatively low at 38 and 49 per 1000 respectively, adult literacy rates are almost 90%, vaccination coverage is reported to be high, and 90% of births are attended and have been preceded by ante-natal care. Less favourable are figures for maternal mortality of up to 250 per 100,000 births in some areas, while only 24% of the population have access to safe water and 14% in the rural areas have adequate sanitation facilities (WHO Report 1995).

Since 1987, the economic and political climate has been changing rapidly with the move from a centrally planned to a market-based economy. However, reform was accompanied by a fiscal policy calling for a reduction in public expenditure, including cuts in allocations for health care. As a result, the health sector has been increasingly under pressure. Public resources are no longer sufficient to respond to the need to improve the quality of care, especially in the poorest provinces.

Accordingly, the Government recognized the need for cost-sharing with the population as a viable alternative and, in August 1992, issued a national Health Insurance Decree calling for compulsory health insurance for salaried workers in the public and private sectors (Ministerial Decision No. 299/HDBT). Voluntary membership of the scheme was made available from the start, in an attempt to improve access to health care for rural populations. This Decree was immediately followed by the implementation of health insurance in several provinces, with major focus on the province of Hai Phong in 1992, which had in fact started a pilot scheme in 1989.

A policy unit to monitor the pilot schemes and guide the development of health insurance was created in the Department of Finance and Planning of the Ministry of Health. The Viet Nam Health Insurance was established as the operational unit within the Ministry of Health to implement both compulsory and voluntary health insurance throughout the country, through a series of decrees related to contribution levels, collection, benefits, the use of contribution revenues and provider payment.

2. THE MINISTRY OF HEALTH/WORLD HEALTH ORGANIZATION HEALTH PROJECT ON INSURANCE DEVELOPMENT

2.1 Background of the Project

The Initiative of Intensified World Health Organization Cooperation (IWC) with Viet Nam was started in 1990, with health care financing included as a major component from the beginning. Following progress in activities to enhance the capacity of the Ministry of Health (MOH) in planning, financial management and alternative forms of

health financing, and the passage of the Decree of Health Insurance by the Government of Vietnam in August 1992, specific technical assistance in health insurance was added.

Initial work on health care financing included seminars in 1991 on the basic principles of health care financing (Perrot and Sergent, 1991) while follow-up missions in August 1991 dealt with costing methodology (Sergent, 1991), through the creation of a national working group. Further missions took place from 1992, and these concentrated on the growth of health insurance in pilot provinces after implementation of the Decree of August 1992. At the same time, work on fee schedules and budgeting in the MOH health care facilities continued. This work was reviewed during a technical visit by one of the national counterparts at WHO/HQ in June 1993. Two of the counterparts were sent for graduate training in health economics in October 1992 and on their return were able to take responsibility in planning and implementing the changes in MOH budgeting required by the changes in health care financing through user charges and insurance. Financial support for these activities was provided by the Government of France.

A Plan of Action dealing specifically with health insurance development was formulated in June 1993, as a MOH/WHO Project on Health Insurance Development. The Project formulation benefited from discussions with the national counterparts, WHO Western Pacific Regional Office, the WHO Office in Hanoi and the Swedish International Development Agency (SIDA). Involvement of SIDA followed their role as a major donor in the health sector, and the inclusion of areas related to health insurance in the Viet Nam Swedish Health Cooperation Plan for 1994 - 1999.

The overall objectives of the MOH/WHO Health Insurance Development Project were to strengthen the capacity of the MOH and the Viet Nam Health Insurance (VHI) to formulate and adjust health insurance policy, in order to improve health and health care for the population of Viet Nam. The project was planned initially to concentrate on four selected provinces: Hai Phong, Thai Binh, Bac Thai and Ninh Binh. At central level, emphasis was placed on national health insurance policy, following the Decree of 1992, taking into account lessons learnt from pilot provinces and health insurance development in countries in the region.

Four basic strategies were adopted and activities requiring further technical and financial support were planned accordingly:

Strategy 1: Improvement in knowledge and public education.

Seminars on the principles of health insurance

Training of trainers

Information campaigns for the insured

Study tour to countries in the Region

Short-term fellowships in the Region

Long-term study in health economics
National Conference on health insurance

Strategy II: Extension of health insurance through adaptation to additional population groups:

Review of progress and development of options in pilot provinces
Coverage of special groups: very poor and vulnerable individuals

Strategy III: Utilization and cost studies:

Study of health care costs at health centre and hospital levels
Study of utilization patterns
Satisfaction study

Strategy IV: Improvement of management and control functions:

Health insurance information system
Short-term visits focusing on management
Continuation of financing components: budgeting and costing, including provider-payment issues
Resource allocation at district, provincial and national levels

The Project Plan of Action was developed such that it could be periodically revised, to allow for identification of training and information needs and progress in the implementation of the Decree across the country, and to reinforce the basic health care financing components. Financial support for the Project was obtained from SIDA.

2.2 Activities carried out

Strategy 1: Improvement in knowledge and public education.

Seminars on the principles of health insurance were held at central level in September 1993 and January 1994. The second seminar was planned as a Training the Trainers workshop and attended by individuals from the MOH and VHI who would later plan and undertake training at provincial level. The seminars covered the principles of health insurance, covering revenues and expenditures in health insurance schemes, the scope and provision of health care benefits, provider payment methods, management functions of a health insurance scheme and the basic information system to support health insurance and steps in planning and implementation of health insurance. Both seminars provided an opportunity first to hear reports on the current status and problems of compulsory and voluntary health insurance in Viet Nam.

Shorter seminars on the principles of health insurance were held in Thai Binh and Bac Thai Provinces. The participants included the Provincial Health Insurance Board, chaired by the Vice-Chairman of the Peoples Committee at provincial level.

Workshops for health care providers were held in Hai Phong and Thai Binh in 1994. These were planned as meetings with providers of health care in the provinces together with the provincial offices of the VHI. The workshops dealt briefly with the basic principles of health insurance and then concentrated on provider payment issues, information systems to support quality assurance and relationships between the health insurance agency, the providers and the insured persons.

To facilitate the development of national capacity, a simulation model for the development of health insurance in Viet Nam was designed and first demonstrated at the seminars (Carrin, Sergent and Murray, 1993). The national counterparts were later trained in use of the model, and visits to the pilot provinces included the application of the model using actual data from the provincial VHI offices, the results of the studies on costs of health care and expected utilization of the major benefits.

The MOH/WHO Project did not undertake information campaigns for the insured as these had already been developed by the VHI.

A study tour to South Korea, Indonesia and Thailand was planned but did not take place. Following several delays due to changes in the composition of the participants, most of the candidates for the study tour visited Indonesia through an activity sponsored directly by the VHI. Several other members of the team had already visited health insurance agencies in Thailand and South Korea, and it was therefore decided to avoid duplication of this activity.

To date, three members of the national team have been sent for degree courses in health economics at Chulalongkorn University in Thailand. All three currently hold senior positions in the Ministry of Health and remain involved in health insurance development at national level.

The National Conference on health insurance was postponed several times due to changes in the MOH. To some extent, its objectives were reached through the Round Table Meeting on Health Insurance Development held in Hanoi in May 1996. This meeting was attended by the Minister of Health, senior officials of the Ministry of Health, including the VHI at central and provincial level, the Ministries of Finance, Planning and Investment, Labour, Invalid and Social Affairs and the Government Office. In addition to the World Health Organization, the meeting was attended by representatives of the Embassies of Sweden and France, and the International Labour Organization consultant to the social insurance reform project. The meeting therefore provided a broad forum, involving the policy and operational units dealing with health insurance, all relevant ministries as well as the donors and technical support agencies, to discuss progress, future priorities and objectives.

Strategy II: Extension of health insurance through adaptation to additional population groups:

Repeated visits were made to review options to extend health insurance coverage in selected provinces, first through the development of the family membership concept in Ninh Binh Province. The approach taken in Ninh Binh and in other pilot provinces, was to strengthen compliance in compulsory insurance, and thereby to broaden the base for the extension of coverage through voluntary affiliation of family members at a discounted contribution rate, and covering all family members.

In Hai Phong Province the focus was on covering the very poor, or individuals and family members recognized as recipients of welfare allowances through local Government funds. The provincial government, through the People's Committee, purchased annual health insurance membership cards for distribution to the recognized list of welfare recipients. This method was developed at the initiative of the provincial office of the Hai Phong Health Insurance and later also was used to purchase cards for welfare recipients in Hanoi and Nghe An Provinces.

Throughout the Project, discussions were held with SIDA and the MOH on ways to extend coverage to the very poor through the Viet Nam Swedish Health Cooperation (VSHC) component dealing with health in disadvantaged areas and populations. As the component was eventually dropped from the VSHC, national policy on covering the poor was not developed and different approaches evolved in some provinces. In several provinces, non-governmental organizations, such as the Red Cross, sponsored membership cards for a limited number of poor families, on an ad hoc rather than institutionalized basis.

Strategy III: Utilization and cost studies:

The first study covered health care costs at district hospital levels, and provided a breakdown of expenditures on salaries, drugs and medical supplies, housekeeping and maintenance functions and administrative costs. An extension of the study was carried out to obtain average costs per in-patient day and per patient in two commune health stations, two district and two provincial hospitals. The second study, undertaken a year after implementation of the Health Insurance Decree, was designed to compare utilization and costs of specific services between insured and non-insured in-patients in two district and two provincial hospitals. This study too was extended, to compare insured and non-insured patients in specific diagnostic categories in internal medicine, general and orthopaedic surgery.

Throughout the Project, health insurance development in the province of Hai Phong was monitored. The scope of data collection allowed for comparison of the target versus insured population, the comparison of revenues from contributions with

expenditures for services and other functions, and coverage of the indigent population through the "free card" system adopted by Hai Phong Province. The data provided the foundation for the simulation model later developed for use in the Project.

Strategy IV: Improvement of management and control functions:

In the first stage of the Project, repeated visits were made to the pilot provinces to review provincial and district management patterns, the financial aspects including revenues from contributions, expenditures on benefits, the use of surpluses, and provider aspects. These visits were made to the provincial VHI office, the Provincial Health Bureau and a number of district hospitals and health centres at commune and district level. At a later stage, observations from the visits and current issues were discussed with the senior officers of the national headquarters of the VHI in Hanoi. During these visits, the use of contribution revenues to improve the local health services was discussed. Analysis of trends in registration and contribution revenue during the visits increased awareness of problems related to compliance in compulsory insurance. In several provinces, the decision to use existing surpluses to improve in-patient conditions in hospitals was successfully implemented.

A mission to review the scope of the health insurance information system developed by the VHI in several provinces was carried out in July 1994. The Project then supported the purchase and installation of computer systems in 4 additional provincial offices of the VHI to enable expansion of the information system in provincial offices.

3. DEVELOPMENT OF HEALTH INSURANCE FROM 1992 TO 1996

3.1 Target population

3.1.1 Development between 1992 - 1995

The Health Insurance Decree of 1992 stipulated coverage of all salaried and retired workers in the public sector and all salaried workers in the private sector. The Decree gave eligibility for benefits to the workers only, and dependents of the insured could enrol in the voluntary insurance channel, which was primarily designed for the rural farmer population and the self-employed.

The target population for health insurance coverage currently does not include military and police personnel, and children under 6 years of age. The target population also specifically excludes Mountain Area villages, most of which are in areas now termed "New Economic Areas", with special taxation and economic development benefits for three years, beginning in 1995.

In many provinces, schoolchildren (over the age of 6 years) were insured under a general insurance policy developed by the Viet Insurance Company (Bao Viet), which is the state company dealing with liability insurance for property, motor vehicles, and other general areas. This situation meant that three parallel health insurance schemes were in operation from 1993, and that different members of the same family could be in one of the three schemes, with different contribution levels and different benefits. In addition, several state industries, such as coal mining, rubber, oil and gas companies, initially set up their own insurance schemes. No standard methods to cover very low-income or non-economically active individuals were promulgated during that period, but provinces were encouraged to introduce forms of support, particularly for poor populations, through local government, national and international agencies.

By the end of 1994 it was reported that close to 4.5 million persons or 5.5 percent of the total population were insured: 2.5 million salaried workers, 1.5 million retired civil servants and the rest under voluntary insurance in the 53 Provinces. These figures implied that close to 90 percent of public sector salaried workers were registered, and over 90 percent of public sector retirees were registered. Government ministries transferred the contributions for their employees as well as retirees on a regular basis. However, many small state enterprises claimed that they were unable to pay the contributions, creating a discrepancy between registration and actual continued coverage.

In the private sector, compliance appeared to be significantly lower, as many private enterprises were not registered at all, did not report all workers on their payroll or under-reported their salaries. In addition, the most rapid growth in private enterprise has been in small businesses with less than 10 workers, which is the starting number of workers for compulsory coverage.

During the first stage, the combination of a deterioration rather than improvement in conditions in hospitals, and the introduction of user charges initially far below real costs for all the care components failed to provide motivation to increase membership in health insurance. The benefits of health insurance revenues into the health care system were not always visible as there were no clear guidelines on their use to improve hospital or health centre infrastructure or even the availability of necessary drugs for the insured patient. Salaried workers were not motivated to push their employers to register them. The urban and rural self-employed population had insufficient information to want to join the voluntary scheme to avoid out-of-pocket user charges.

In some areas, it was even reported that insured persons would deny having membership cards when seeking hospital care. This was due to some negative behaviour of hospital staff as they perceived that insured patients would not want to give them any additional or direct payment, in cash or in kind, as was the practice in some places. At the same time, the imposition of user charges on a wider scale, out-of-

pocket payment for drugs as well as unofficial payments to providers began to create barriers to seeking care. As the very poor were exempt from these charges, a new trend appeared in which patients claimed they were poor and had no family support and indeed were not visited by family members during their hospitalization. For all these reasons, although the concept and regulations of the Health Insurance Decree were widely promoted in the media throughout the country, motivation to join was generally low until the end of 1995.

3.1.2 Health Insurance membership in mid-1996

At the Round Table Meeting on health insurance in Viet Nam held in May 1996, reports from the officials responsible for health insurance policy in the Ministry of Health and from the VHI reported the growth of both compulsory and voluntary health insurance in all Provinces. By mid-1996, around 9 percent of the population were covered by health insurance, including the compulsory, voluntary and schoolchildren schemes. The number of insured persons reached almost 7 million, composed as follows:

Compulsory insurance:

| | |
|------------------------|-----------|
| Civil servants | 1,000,000 |
| Enterprise workers | 1,400,000 |
| Retired workers | 1,500,000 |
| Special social support | 900,000 |

Voluntary insurance:

| | |
|------------------------|-----------|
| Schoolchildren | 2,000,000 |
| Free cards for welfare | 130,000 |
| Returnees | 4,000 |
| Dependents of workers | 30,000 |
| Farmers | 15,000 |

Total: 6,979,000

The figure for enterprise workers includes around 250,000 employees in the coal mining, rubber, oil and gas industries. The membership of these groups is now reported under the VHI, but separate accounting of their funds are maintained. The rubber and coal mining industries have started some coverage of dependents, with contributions shared by the company and worker.

The two large new groups are the social group and schoolchildren. The first results from a Government Ordinance issued at the end of 1995 regarding special social support for persons with meritorious services to the revolution, invalids, orphans of

veterans and heroes' mothers. The Ministry of Labour, Invalids and Social Affairs (MOLISA) directly pays VHI the flat-rate premiums for these individuals.

The second group, schoolchildren aged 6 years and over and students in higher education, results partly from an effort to shift the health component from the school insurance policies offered by the State Viet Insurance Company to the VHI. For the 1995/96 school year, about half of the VHI provincial offices had initiated school health insurance, with Hai Phong covering 70 percent (240,000 children) of the target population and Ho Chi Minh City covering 40 percent.

Another new category is the returnee population. In 1995, the European Union began a programme to cover contributions for around 4,000 returnees to Viet Nam. A non-governmental organization (SEARAC) now provides free cards for 100 persons, apparently without a commitment for future years, in Hué Province. This appears to be the only instance of an external agency covering health insurance for the poor.

The growth in membership is clearly due to efforts to cover specific groups, such as schoolchildren and the social group. It is also due to increased attractiveness of the scheme, related to significant increases in user charges and some visible general benefits through the use of past surplus funds to improve the delivery system. At provincial level, Hai Phong has reached the highest population coverage, with 35 percent of the population or 550,000 persons registered by mid-1996.

3.1.3 Further efforts to extend membership

Compliance with the registration of workers covered by compulsory insurance has improved in the public sector but is still weak in the private sector, in which it is estimated that around half of all salaried workers are not registered. It is not clear to what extent this means that higher paid workers are left out. There is also a need to examine a trend to engage workers on temporary or piece-work bases, in order to avoid payment of employer contributions to health insurance as well as other levies.

The number of voluntary insured persons is still negligible in most provinces and at the beginning of 1996, 38 of 53 provinces still had no voluntary insured at all. Of the total 130,000 persons covered, almost 120,000 were in Hai Phong Province and 10,000 in Nghe An Province through the free card system. Reports from the VHI Office in Hai Phong Province show that a clear policy and coordination with local government dealing with welfare issues can at least promote fairly good coverage of the indigent population.

The family membership concept of voluntary insurance for the dependents of the compulsory insured, started in Ninh Binh Province in 1995, has not been sufficiently promoted. Some VHI Provincial offices reported delays in approval of the proposed contribution amounts (flat-rate) for voluntary insurance by the People's Committee. On

the other hand, the rubber and coal-mining companies have recently taken initiatives to enrol their workers' dependents through voluntary insurance. Both are national level state enterprises, with workers in several provinces. The national administrations of these companies have taken decisions to share flat-rate contributions for dependents with their workers.

In describing the membership situation at present, several features of the health insurance system in Viet Nam should be noted. First, the compulsory scheme covers workers only and not their dependents. Second, the compulsory scheme has included retired public sector workers since its inception, which imposed a burden on a new scheme, as utilization and expenditure for the elderly are more than twice the average for the total insured population. The fund also does not have the benefit of reserves from past contributions from the retired workers during their years of economic activity, as in the case of established schemes. In the first two years of implementation, the retired constituted more than 50 percent of the insured population. They now constitute 30 percent and this proportion will obviously decline over time, but the proportion will remain high compared to other national social health insurance systems.

The major implication of these two features is that contributions of the salaried workers heavily subsidize retired workers rather than dependents of the same worker. This is a given factor and needs to be recognized. The current approach to having dependents in a voluntary and separate scheme creates some difficulty in the growth of membership and may have negative implications regarding equity. One problem is interest in registration of family members when workers in an enterprise may have very different salary levels. Workers with lower salary levels or workers in low-income enterprises may be less prepared to enrol their dependents. So far the contributions for dependents is the same flat-rate amount, regardless of the individual worker's salary. As the salaried sector grows in Viet Nam, it would obviously be faster and fairer to extend coverage if dependents were automatically covered through the compulsory insurance mechanism, through an adjusted contribution based on percentage of salary.

Another issue in considering the extension of membership towards universal coverage is the current provision regarding children. A Decree of 1995 stipulated that health care for children under 6 years is free, that is, financed by the MOH through general revenues. In practice, the level of funding is determined mainly by provincial level resources. As government funding is basically low, (reported to be US \$3.00 per person in 1994), reliance on public funds for the health care of children does not necessarily imply an adequate level of funding in all provinces. Here again, the inclusion of children of all ages in the same health insurance scheme needs to be reconsidered. The inclusion of all children would also facilitate the conventional family approach to health insurance, whereby all family members could be covered, through compulsory insurance for the salaried workers and voluntary insurance for the self-employed sector, at least until compulsory universal coverage can be implemented.

3.2 Contributions to compulsory and voluntary insurance

The monthly contribution rate in compulsory insurance was set at 3 percent of salary, 2 percent to be paid by the employer and 1 percent by the worker. This rate should be considered relative to other social insurance contributions. In accordance with the on-going reform of the social security system in Viet Nam, 15 percent of salary will go towards the pension fund, and another 5 percent for employment injuries and diseases, maternity (reimbursement for health care and cash benefits) and cash benefits for sickness.

While registration of the number of workers has improved, the wage base on which contributions are calculated has been problematic. Many state and private companies began with reporting a standard wage for all workers, usually corresponding to the lowest paid workers, and then computed the contribution for all employees on the basis of this lowest wage. There has been considerable improvement in the reporting of wages since implementation of an agreement with the income tax authorities (at provincial level) in 1995, whereby information on real wages paid is relayed to the VHI. The Ministry of Finance, which is responsible for income tax assessment and collection, has introduced regulations allowing for the blocking of the enterprise bank account as a sanction in such cases of non-compliance with social insurance regulations. In the last year, differences in the calculated versus actual contribution paid (on the basis of wages reported) were collected from the enterprises and passed on to the insurance revenues, usually through the Provincial Health Bureau.

No defined rates were set for voluntary insurance, and the contributions were set as flat rate amounts for each individual registered, varying among provinces. These rates have ranged from D 10,000 to D 60,000 per person per year, depending not only on provincial income factors but also the extent of benefits covered in the initial stage. Throughout this period, D 11,000 is equivalent to US \$1.00. While many provinces retained amounts of between D 30 - 40,000 in 1996, other provincial VHI offices have been held up by a lengthy approval process when amounts of D 60,000 per person were proposed. Currently, there are no regulations relating the contributions to provincial income levels or limiting the frequency of increase in the flat-rate contributions.

When insurance for schoolchildren was first promoted, the flat-rate contributions were around D 10,000. The amounts prepared for the 1996/97 school year are still around this amount, but vary by school level (primary, basic secondary and secondary). The amounts are considerably higher in Ho Chi Minh City where the contributions for the 1996/97 school year were set at D 20,000 per child for primary school, D 25,000 for basic secondary school, D 30,000 for secondary school and D 35,000 for university students. Of these revenues, 5 percent is allocated to cover membership for children whose families cannot afford these contributions.

The annual contribution per person for the social group supported by MOLISA is now D 43,000 per person. The contributions for the poor or special groups paid by external donors was set at US \$ 12 per person for 1996.

For all provinces, the average annual contribution per worker for all provinces is now close to D 90,000, and the number of insured persons in this category is growing as compliance among private sector salaried workers grows. The question is to what extent this contribution can in fact subsidize lower contributions in voluntary insurance.

While this first depends on the ratio between revenues and expenditures in the health insurance system, the issue has implications for the eventual extension of coverage, beginning with family members of workers. The combined administration of the compulsory and voluntary funds does indeed create the mechanism for subsidization between the two schemes, but this needs to be formally guaranteed by regulations in order to be carried out in all provinces.

3.3 Health insurance benefits

The Decree of 1992 stipulated that persons covered under compulsory insurance were entitled to health care benefits classified as: medical examination, diagnostic tests, drugs, diagnosis and treatment operations. The regulations stated that benefits could be received through visits to health facilities for in-patient and out-patient treatment. It was further stipulated that the charges for these benefits would exclude depreciation on fixed assets, salary for health workers, upgrading of medical equipment and training in the provision of medical care for insured patients. The same stipulations applied to the user charges levied for non-insured patients.

In the first two years following the Decree, benefits were not uniform across provinces, though most covered ambulatory care and in-patient hospital care, including professional services, surgical procedures, diagnostic services, prescribed drugs and accommodation. Thai Binh, one of pilot provinces, initially covered only hospital in-patient care. In voluntary insurance, the tendency of most provinces was to cover only in-patient care. From the beginning, provider payment was made by the VHI, and patients were reimbursed only in exceptional cases. The reimbursement level initially varied among provinces, some of which also imposed ceilings on the amount of reimbursement per episode or per insured person per year. On average, an insured patient had around 70 percent of in-patient care costs covered by the insurance scheme at that stage.

A Decree issued in late 1995 (Decision 95/CP) does not implicitly state that benefits include both in-patient and out-patient services in hospitals and community health care facilities. However, their inclusion is implied by the stipulations on the payment for this range of health care, as included in the subsequent Circular issued by the Ministry of Health (No. 14/TTLB). This is now accepted by VHI offices in all

provinces, most of which now have formal contracts with hospitals at provincial and district level and with commune health centres for the provision of care to their members. According to the Circular, the VHI now covers the full charge for the services used, without ceilings or co-payment.

Although an inclusive essential drug list and list of medical procedures has not been compiled specifically for the purposes of health insurance, the Circular clarifies which expensive and rare drugs, tests and surgical procedures are covered by health insurance.

3.4 Use of health insurance revenues

Guidelines for the use of VHI revenues were stipulated: 90 percent was allocated for health care, 8 percent for administration, 1.5 percent for reserves and 0.5 percent for central administration. Initially, 30 percent of the health care budget was allocated for ambulatory care. This was later changed (1995) to 40.5 to 45 percent. However, certain services or functions were not included. For example, health education and health promotion currently cannot be included as health care or under administration.

Administrative costs may have been fairly low in the first stage. From the beginning, the VHI adopted a management approach which included central control of policy, information systems and training activities, but decentralized (at provincial level) management of registration, contribution collection, determination of benefits, contribution levels for voluntary health insurance, claims review and reimbursement procedures.

The VHI expenditure on training is a minor but important issue in the use of revenues. Currently, the VHI Central Office must submit training plans to the Ministry of Health for approval for the coming year. This creates problems in providing training to deal with new regulations promulgated or implemented during the year.

A major issue until 1996 was the financial status of the provincial VHI funds. There appeared to be surpluses of revenues from contributions over expenditures for health services to the insured in all provinces. To some extent, this could be accounted for by low utilization of health care by the salaried, and presumably healthy workers. The contribution rate of 3 percent of salary could be considered high as only the worker was covered and no benefits were extended to dependent family members. In addition, the benefits were not clearly defined at that stage. However, the large proportion of retirees among the insured and particularly among the patients who received in-patient care, would contradict these assumptions. Similarly, low utilization behaviour patterns among the population may have been counterbalanced by some generation of unnecessary services by the providers.

On the other hand, the level of charges for in-patient services in the first years was relatively low. Before the 1995 amendments to the regulations, hospital in-patient charges had been made on a flat-rate per day basis, including most services, while fee-for-service billing was only applied to out-patient care, according to Circular No. 20 of 1994.

Another factor explaining the surplus in the first three years may have been the very low registration in the voluntary insurance scheme, which would have benefitted from any surplus in the compulsory scheme. Whatever the reasons, there was an immediate need to channel the surplus to relevant targets, such as improvement in health care facilities and subsidization of voluntary scheme contributions. The VHI was created as a social insurance scheme and investment of surpluses is currently not permitted. However, the improvement of the health care system infrastructure as a means to improve health is recognized as a valid use of funds. By the beginning of 1995, when the surplus was running at around 30 percent of expenditure in most provinces, almost all provincial VHI offices began to use these funds to improve health care facilities.

Any future surplus will depend on changes in fees, changes in the composition of the insured population, changes in the range of benefits covered as well as changes in health care provider and utilization behaviour. At the same time, the VHI Central Office is now pushing for government consent to invest revenues, at least on a short-term basis, in health related enterprises (pharmaceutical companies have been mentioned, as it is suggested that this could have some impact on the price of drugs for the insured population.)

3.5 Provider payment methods

Early discussions during the provider workshops carried out through the Project indicated the clear linkage between hospital revenue through government allocations, provider payment through insurance and user charges on the one hand, and health insurance membership on the other. In the first years following the 1992 Decree, Ministry of Health allocations from central to provincial level did not increase as a percentage of GNP, which meant stagnation in this source of revenue. Hospital staff salaries were still paid through central government funds, and computations of the recurrent costs of health care facilities were not well developed. Training in MOH capacity to develop pricing methods and budgeting was in fact a major target of the WHO technical support to health care financing. In the interim, fees for specific services appeared to be arbitrary at the different provider levels (such as provincial and district facilities) and were not applied uniformly across the provinces.

In the first three years of implementation (till the third quarter of 1995), billing for out-patient services was based on a fee-for-service method, within the following

categories: drugs, laboratory services, x-ray and minor surgery. No charge was made for consultations at that time. In-patient care was billed according to a global per diem amount including most services. Both out-patient and in-patient bills included data on the volume and charges for all services provided.

Although the charges to the patient or insurance scheme were relatively low in the first stage, the value in supplementing the reduced government budget through health insurance payment for services soon became clear to the providers. By 1994 several provincial offices of the Viet Nam Health Insurance were concerned with charges for unnecessary services to insured patients, and suspected significant differences between insured and non-insured patients. This was difficult to evaluate because of the age composition of the compulsory insured population. As retired civil servants initially constituted 50 percent of the insured population, and then around 30 percent as more workers were registered, any differences in utilization had first to take the age factor into account. This factor was further compounded by the fact that many of these retirees had delayed seeking care in the past. These issues determined the scope of the studies undertaken in the Project, as described in Section 4 of this paper.

During 1994 and 1995, the VHI noted that pressure for unnecessary services could be generated by several factors: the low allocation of 30 percent of insurance revenues for ambulatory care, changes in provider behaviour, some limitations on benefits (e.g. complicated deliveries but not normal deliveries) and the need to improve the infrastructure and equipment level to demonstrate the advantages of health insurance. The VHI considered direct provision of ambulatory care, and indeed developed an out-patient clinic near the provincial hospital in Hai Phong. In some provinces, the VHI appointed teams of physicians to assess the need for hospitalization and authorize the length of hospital stays for their insured members. These steps were first taken to control costs rather than to establish a regular quality assurance programme.

Early in 1995 a new resolution on Health Care Financing was introduced, with direct implications on health insurance. The regulations issued to implement the changes (through Circular No. 14/TTLB on September 30, 1995 of the Ministries of Health, Finance and Labour, Invalids and Social Affairs and the Government Price Commission, and Circular No. 14/TT-BYT on October 24, 1995 of the Ministry of Health) replaced all previous resolutions and circulars on user charges, exemptions from payment, and health insurance payments.

With regard to persons with health insurance, the patients are not charged and all payments are to be settled between the providers and health insurance companies. The resolution stipulates that the insured will not make payments to the providers, except in the following circumstances:

- (a) the medical procedure, as defined by the Ministry of Health, is not included as a health insurance benefit
- (b) special accommodation conditions (such as air-conditioning and telephone) are provided at the patient's request and expense.

While Resolution 95/CP of the MOH sets the fees, the provider payment method was amended by Circular No. 14/TTLB of 1995, which stipulates that the charges will be made on a fee-for-service basis for both out-patient and in-patient care. The service categories were defined as follows:

| | |
|--------------------------|----------------------------------|
| Out-patient care: | In-patient care: |
| Drugs | Drugs |
| Laboratory tests | Blood and plasma |
| X-ray | Transfusion fluids and materials |
| Minor surgery | Laboratory tests |
| Consultation fee | X-ray |
| | Accommodation |

The consultation fee added to the out-patient bill was set at D 2,500 per visit and was the first indication of any direct payment for professional services. While in-patient care does not have this component, the Circular stipulates that charges for other costs, such as depreciation, professional services related to diagnosis and surgical procedures are partly included in the payment per day (within the accommodation cost). The Circular further states that 30 percent of the total revenue from both out-patient and in-patient care will be shared among staff as a bonus.

These changes were implemented in the third quarter of 1995. While the Resolution provides for guidelines, it was left to each Provincial Health Bureau to set the fees for their health services. In the absence of a drug policy, there is even variation in drug prices and charges among hospitals. The VHI has attempted to control drug costs in some areas by entering agreements with pharmaceutical companies on mass purchase and distribution to the contract providers. Fees for services provided by national (tertiary) hospitals were set by the national Ministry of Health. The full new fee schedules have now been determined and implemented for the central hospitals and tertiary provincial hospitals.

The exemptions to all these charge and payment regulations now apply to fees for services to invalids, children under 6 years of age, patients with specific mental diseases, epilepsy, tuberculosis, inhabitants of the New Economic Areas and very poor people.

Payment for health services provided to the insured in Government health care facilities accounted for around 12 percent of the Ministry of Health budget by mid-1996. However, in some hospitals, payment from health insurance accounts for over 50 percent of income. This means that at the level of the Government provider, such as the district or provincial hospital, health insurance revenues can constitute a significant part of the recurrent costs. Government hospital budgets still exclude staff salaries, and capital costs, and an appropriate pricing method to reach valid estimates of all recurrent costs therefore remains a problem.

Most VHI Provincial offices have agreements with the commune health stations for the delivery of primary health care. Again, billing is made on a fee-for-service basis for actual services provided to the insured, but in some provinces, such as Hai Phong, the VHI provides money in advance to guarantee an adequate drug supply, and pays an increment to the staff salaries.

Following the implementation of fee-for-service billing for out-patient and in-patient care from the third quarter in 1995, in accordance with Circular No. 14, provider payment has become a major problem, with most VHI Provincial offices now claiming that they are beginning to run into deficits. Analysis of typical out-patient bills shows that expenditure on drugs accounts for 75 - 80 percent of the total bill, with antibiotics and vitamins prescribed in most cases. For in-patient care, lengths of stays are long for any age group, and again around 75 percent of the bill is for drugs and transfusions, with a high use of transfusions and injections (Tran Van Tien, 1996). These data are indeed shown in the studies conducted through the MOH/WHO Project.

The VHI is increasingly concerned with the financial aspects of the new Resolution. The fee-for-service method for both ambulatory care and in-patient care has already led to a serious increase in expenditure, particularly as it is difficult to control length of hospital stay and the volume and cost of ancillary services and drugs. Analyses of the type of drugs prescribed raise concern regarding future resistance to antibiotics. The long hospital stays for workers and schoolchildren are also disturbing, as they generally imply unnecessary days lost from work and school.

When the fee-for-service billing factor is controlled, length of stay is far shorter and there is less prescription of expensive drugs and less use of transfusions. This is evident from a visit to the hospital operated by the Rubber Company in Song Be Province. Average length of stay in this hospital is 7.5 days for all insured patients, compared to 13.5 days for insured school children, 14 for workers and 16 for retirees in other hospitals.

Senior VHI staff have indicated readiness to go to a capitation payment system, which could allow for cost control of the health care benefits and reduce administrative costs. An additional advantage of the capitation system for the MoH providers would

be that the transfer of a fixed amount (based on capitation) as regular payments for the expected utilization at the agreed amount could make better use of the health insurance revenues at provider level. VHI further believes that such an arrangement could eliminate some dissatisfaction with health insurance, particularly if some revenues could be channelled to improving staff remuneration and working conditions.

When the new Resolution was promulgated, the approach taken was to wait and see when the new charges would actually be implemented. The VHI is keen to enter into capitation agreements with providers as soon as possible but current regulations (both the Resolution and Circular No. 14 of 1995) prevent such a shift on a broad scale. The current intention is to try capitation on a pilot basis, and to further analyze the data showing the impact of the present provider payment method. It certainly seems possible to offer a capitation amount that would provide the necessary revenues to the providers, including the bonus allocation, without channeling most of the funds to pharmaceutical companies as the current practice entails.

3.6 Administration of health insurance

All health insurance administrative activities are carried out through the Viet Nam Health Insurance (VHI) as a State company within the Ministry of Health, under a Vice Minister for Health charged with this responsibility. Supervision is statutorily the responsibility of a Health Insurance Board, currently chaired by another Vice Minister of Health and with members from within the Ministry of Health and other ministries.

Over the last four years, VHI offices have been set up in all 53 provinces, most with branch offices in some or all of their districts. In addition, the VHI has two central offices, located in Hanoi and Ho Chi Minh City which are responsible for development and monitoring activities for defined provinces in the north and south of the country and also cover specific populations. These are the active and retired workers of the national level ministries and state enterprises. The Hanoi Central VHI Office serves as the national directorate. This Office is responsible for all operational guidelines, monitoring of registration, contribution revenues and expenditures as well as training, promotion of the schemes and public relations.

The provincial VHI offices typically have a Director (usually a physician or pharmacist), several physicians engaged in relations with providers, the information system and claims reviews, at least one accountant and several clerks. At provincial level, the Vice Chairman of the Peoples' Committee serves as Chairman of the Provincial Health Insurance Board, while the Director of the Provincial Health Bureau serves as Vice-Chairman.

Within the VHI, there is clear recognition of the need to upgrade management at central, provincial and district levels. Discussions with senior Central and Provincial VHI

staff currently focus on the lack of trained staff to carry out management functions, including coping with provider behaviour. This lack of training hampers efforts to deal with current provider behaviour through the development of quality assurance based on an adequate information system.

Consumer issues have been attributed to the lack of awareness of health insurance and here again, the lack of experience hampers development of appropriate promotion and public relations material and methods. The foundation for central administrative and training functions has been established through a transfer of a set percentage of contribution revenues from each province to the VHI Central Office for these functions. The areas in which urgent attention is needed are appropriate recruitment of senior health insurance staff at provincial and district level, training needs and methods, as well as improvement and extension of the computerized information system.

The progress of implementation of both compulsory and voluntary health insurance during the first years is complex to evaluate. In the MOH, emphasis was placed on monitoring progress in 4 pilot provinces: Hai Phong, Thai Binh, Ninh Binh and Bac Thai, and particularly on finding ways to develop the voluntary health insurance component. As noted above, offices of the VHI were established in all 53 provinces to deal mainly with the compulsory component, and the VHI central administration developed and conducted training programmes for their officers and set up the necessary information system to deal with registration and payment of contributions. That is, the VHI developed its operations across the country in parallel with policy development by the MOH and without necessarily waiting for policy guidelines. It was clear, however, that there were serious problems in policy development not only within health insurance proper but in the relationship between health insurance as a financing mechanism, the Ministry of Health budgeting methods and expectations of the government and the insured.

A feature of health insurance in Viet Nam is that it is currently administered by decrees and not by legislation. As the Government target is to cover the entire population, understanding of all the problems noted and the search for feasible and acceptable solutions are necessary for the development of sound legislation and regulations.

3.7 Future locus of responsibility

In 1995, the Government began a reform of the social security system through a three-year project funded by the Government of the Netherlands. Contacts with the nationals and team of the International Labour Organization responsible for technical support to the project have been established. Although health insurance is currently under the responsibility of the Ministry of Health, while other social insurance branches

are under MOLISA, it is extremely important to have at least compatibility of the information systems of each at this stage, and if possible, merged contribution collection systems for the compulsory insured. There has been some discussion of merging all social security branches under a single administration, within a structure outside both the Ministry of Health and MOLISA. The administrative structure of both is likely to be further discussed and determined by the end of 1996.

Regardless of the locus of responsibility for the administration of health insurance, that is, within the MOH or outside, there is an obvious need to define the responsibility and scope of policy and operational functions. This is necessary to achieve an on-going process of review and amendment of policy to reach social goals in the extension of coverage and benefits. A clear definition of responsibilities and functions is also required to achieve financial viability, as the VHI payments for health services to the insured are dependent on pricing policy of the MOH facilities, on the one hand, and the mix of insured persons, on the other.

3.8 Health and health system development

The development of a viable and effective health insurance system in Viet Nam is obviously linked to both the health trends and health services system development. Throughout the period of WHO support, several issues related to both areas have been noted, as summarized below.

In the provinces visited by the WHO team since 1992, the health services system is characterized by a resource pattern including several large (around 500-bed) provincial and central hospitals, with around 85% occupancy, and 1 doctor to 2-3 beds; 1 - 2 district hospitals per district with around 100 beds, with less than 50% occupancy, and 1 doctor to 4 - 5 beds; and at commune level, health stations with beds for normal deliveries and observation, with low use and staffed mainly by medical assistants, nurses and midwives. Physical conditions, medical equipment and training need improvement at all levels.

All the above providers are obviously contenders for health insurance revenues. As the health insurance schemes develop at the district and provincial level, consideration needs to be given to shifts in resources allocation, including infrastructure, staffing and equipment, in the directions of shifts from in-patient to ambulatory out-patient functions in provincial, central and district hospitals; shifts from district hospital to commune health station and shifts from curative to preventive and rehabilitation services.

At the same time, several thousands of military doctors have been discharged in the recent years and tend to set up private practices in their home villages. These doctors are often prepared to accept payment in kind from villagers and play a role in

the provision of primary health care and sometimes the avoidance of in-patient care. To some extent, they now constitute a form of deterrent to purchasing voluntary health insurance. A policy of preparation through training and integration of these doctors into the commune health centres through the health insurance channel could bring them in to the system, to ultimately raise the level of primary health care and provide the elements of good front-line care and the referral system needed to support quality assurance and cost containment in the health insurance system.

The improvement of the health care infrastructure, particularly at the district and central hospital levels could be significant in generating support for health insurance among the population and in improving the quality of health care. Within the development of health insurance at this stage, i.e. in a small number of pilot provinces, attempts could be made to develop plans for infrastructure improvement in selected facilities, and resources could be mobilized to carry out the necessary plans. The potential for collaboration with funding and developmental agencies already active in specific areas could be examined for these purposes. As the World Bank loan includes infrastructure improvement, it would be useful to place priority on provinces with growing voluntary as well as compulsory health insurance.

The supply of essential drugs is an area with direct implications for health insurance expenditures. Problems in the area of drugs in the public sector include inadequate funding, distribution and storage at all levels, and inappropriate prescribing patterns. At the same time, the private sector is characterized by uncontrolled supply in terms of quality and price. With the change in the provider payment system, health insurance claims show an extremely high percent of expenditure on prescribed drugs, characterized by what appears to be over prescribing of antibiotics and vitamins. Activities to improve the situation could be developed through the coordination and integration of the WHO Drug Action Programme and the Pharmacy Department of the Ministry of Health in health insurance development in selected provinces. This could be facilitated by the recent Drug Policy adopted following development with SIDA support.

Diseases related to the community water supply and sanitation are currently the major causes of morbidity and mortality. Efforts to improve the situation could be increased, through intensification of existing programmes and the earmarked allocation of health insurance revenues for water and sanitation projects in selected pilot districts or communes.

All these considerations could relate to the optimal health insurance benefits and the use of health insurance revenues to reach both health status and health system targets.

4. RESULTS OF STUDIES

4.1 Cost analysis

Before starting on a health care financing reform, it is important to know whether any changes in health services provision will be planned. Given this information, the next step is to perform an appropriate costing of the planned health services. The financiers of these costs, including the population, will then be identified. Once it is known what the population's share will be in financing, the structure of the premiums and their levels can be determined.

Costing is thus seen as a necessary step in the establishment of health insurance. The study on cost analysis of health services at Dong-Anh district hospital (Dung and Hien, 1992) was one of the first elements of capacity building at the Ministry of Health in health insurance financing. This hospital has 180 beds and covers the 222,206 population of Dong-Anh district which is one of the 5 suburban districts of Hanoi.

First, the budget level and structure at the hospital was studied. The total budget of the hospital was D 614 557 000 in 1991. The structure of this budget is given in Table 1. One should note especially that the reported share for drugs and medical supplies does not reflect the real use of drugs and supplies. In fact, the hospital then only provided essential drugs for emergency services and surgical interventions. Other medicine and supplies had to be purchased by the patient himself usually at retail pharmacies. Note that, at the time of the study in early 1992, the hospital had just begun pilot implementation of health insurance, and therefore the hospital budget financed via health insurance is still quite modest. The District health budget was reported to finance 90 percent, user fees finance 9.3 percent and health insurance 0.7 percent.

Second, the costs of health services in the following departments were studied: internal medicine, surgery, gynaecology and obstetrics, paediatrics, infectious diseases and emergency. For each of these services, direct and indirect costs were identified. A step-down-allocation method was used to allocate the indirect costs to the various service departments. In Table 2, we summarize the average costs, per patient and per inpatient day, in the above mentioned departments. The data are those related to the first quarter of 1992. It is important to notice that the costs computed include depreciation allowances for equipment and infrastructure.

Table 1 Expenditure at Dong-Anh Hospital in 1991 (in VN Dong)

| Expenditure items | VN Dong | Percent |
|---|-------------|---------|
| 1. Salaries & allowances | 257,565,000 | 39.8 |
| 2. Electricity, water, fuel and transportation | 65,613,000 | 10.1 |
| 3. Drugs and medical supplies | 105,890,000 | 16.4 |
| 4. Repair and purchase of equipment, and building maintenance | 125,318,000 | 19.4 |
| 5. Administrative costs | 38,442,000 | 5.9 |
| 6. Other | 54,729,000 | 8.4 |
| TOTAL | 647,557,000 | 100.0 |

Table 2 Average costs in hospital departments, Dong-Anh hospital (1992), in VN Dong

| Hospital department | Average costs | | Average costs salaries & allowances, and depreciation excluded | |
|---------------------------|-------------------|-------------|--|-------------|
| | per inpatient day | per patient | per inpatient day | per patient |
| 1. Internal Medicine | 13,594 | 75,571 | 4,088 | 22,893 |
| 2. Surgery | 19,932 | 148,393 | 4,454 | 32,958 |
| 3. Gynaecology/obstetrics | 18,052 | 65,484 | 4,440 | 15,985 |
| 4. Paediatrics | 14,734 | 76,526 | 5,240 | 26,724 |
| 5. Infectious diseases | 18,980 | 98,485 | 2,828 | 14,704 |
| 6. Emergency | 20,515 | 65,556 | 6,553 | 20,972 |

Cost analysis will also contribute to fee setting. In fact, imagine as an example that the Government would finance solely salaries and allowances as well as depreciation allowances. That would leave the financing of drugs and medical supplies and other recurrent costs to the population. The net average costs related to the health services are presented in the last two columns of Table 2. These could well be used as a basis for fee-setting by the hospital.

The study reiterated how important it is to base the budget upon needs for curative and preventive services in the covered population. The latter will enable one to achieve a more rational scale for the district hospital, its administration and its health personnel composition. Moreover, the needs for drugs and medical supplies as well as equipment need to be carefully estimated. The latter, properly translated into costs, will be helpful in the provision of health services of a minimum quality. It is important to note that the Ministry of Health later used the same methodology to study the cost structure of a provincial hospital (Dung and Hien, 1993).

4.2 Health services by the insured and non-insured: utilization and costs

A survey was conducted in 1993 on inpatients in Viet-Tiep Provincial Hospital (1799 inpatients) and An Hai District Hospital (264 inpatients), both in Hai Phong Province (An et al., 1995). Data were obtained on the age, sex and insurance status of patients, the diagnosis, and the fees paid both by the patient and health insurance. These data were collected for six diagnoses: appendectomy, herniotomy, fracture of the lower limbs, acute respiratory infection and pneumonia, hypertension and gastric ulcer. The fees recorded included those for accommodation, laboratory tests, X-rays, blood transfusion, surgery and drugs. There were three age groups of inpatients: from 15 to 44 years old, 45 to 59 years, and 60 years and over.

From a descriptive analysis of the data it could be learned that: (i) the insured patients made up 25 percent and 30 percent of the sample of inpatients in the district and provincial hospital, respectively; (ii) the youngest age group occupied the highest percentage among inpatients, namely 50 percent and 60 percent in the district and provincial hospital, respectively. The main results concerning average fees and average length of stay (LOS) , according to insurance status are presented in Tables 3 and 4.

Table 3 Average fees, average length of stay according to insurance status (Viet-Tiep Hospital)

| Insurance status | Average fee per patient, in VN Dong | Average LOS, in days |
|----------------------|-------------------------------------|----------------------|
| Compulsory insurance | 232,283 | 13.1 |
| Voluntary insurance | 258,659 | 10.3 |
| No insurance | 294,030 | 10.1 |

Table 4 Average fees, average length of stay according to insurance status (An Hai Hospital)

| Insurance status | Average fee per patient, in VN Dong | Average LOS, in days |
|----------------------|-------------------------------------|----------------------|
| Compulsory insurance | 74,879 | 10.6 |
| Voluntary insurance | 49,154 | 9.5 |
| No insurance | 62,309 | 8.7 |

The data in Tables 3 and 4 do show a tendency for insured patients to have longer lengths of stay than the voluntary insured or non-insured. However, there is no clear cut correlation between insurance status and the average fees. One might hypothesize that providers, in the event of a fee-for-service system, would engage in excess health services for insured patients, reasoning that care for these patients is covered anyway. However, we see that in the case of the inpatients at the provincial hospital, the observed average fee for the insured inpatients is even lower than for the other inpatients. The importance of drug expenditures as a main component of fees is to be noted here: drugs constitute 60 percent to 65 percent of fees at the provincial hospital, and from 40 percent to 50 percent at the district hospital.

It is true, of course, that insurance status is not the only determinant of fee levels. Other variables such as the age group and the diagnosis group may be relevant. Hence, a multiple regression analysis was performed, with the fee level and the length of stay as the variables to be explained. Regarding the *explanation of fee levels*, it could be concluded, first, that the variation in fees is mostly explained by the type of diagnosis; especially, fracture of the lower limb exerts an important positive effect on the fee level. Secondly, there is a tendency for insurance to lead to lower fees,

although this effect is only statistically significant in the case of patients with voluntary insurance. Age does not have a statistically significant effect on the fee level. In the case of the *explanation of LOS*, especially the diagnoses "fracture of the lower limb" and "gastric ulcer" exert an important positive effect. In this case, age exerts a statistically significant positive effect on LOS; the more an inpatient belongs to an older age group, the longer the LOS. In addition, compulsory insurance status is seen as having a statistically significant positive effect on LOS. The latter effect could already be noted earlier. We find, however, that a longer LOS is not automatically associated with a higher fee (see Tables 2 and 3).

4.3 Development of health insurance in Hai Phong

In September 1989, Hai Phong was the first city to start health insurance through the establishment of the Hai Phong Health Insurance Company (HHIC). Hai Phong is one of Viet Nam's largest cities with a population of about 1,500,000 in 1993. From the start, insurance was in principle compulsory for industrial workers. As from 1993, government administrative workers are also insured on a compulsory basis. Compulsory health insurance contributions are defined by law. For other population groups insurance is voluntary, and their health insurance contributions are established at provincial level. Below we summarize the evaluation of the Hai Phong health insurance experience between 1990 and 1993 (based on Chi, 1993 and Carrin, Sargent and Murray, 1993).

There were basically five categories of insured: government administrative workers (including retired), industrial workers, agricultural workers and other self-employed, spouses and other adult citizens, and children between 6 and 16 years old. In 1993, the target membership, including compulsory insured, was about 20 percent of the population of Hai Phong province. The details of the target membership for 1993 are presented in Table 5. However, the estimated membership in 1993 was only between 7.6 and 11.4 percent of the population. The latter indicates that the HHIC was in great need to foster compliance with the Decree. In fact, a number of factories (for whose workers insurance was compulsory) had not signed up yet with the HHIC.

The structure of health insurance contributions in 1993 is presented in Table 5.

Table 5 Health insurance in Hai Phong, 1993:
Target membership and health insurance contributions

| Category of insured | Estimated Population | Target membership | Health insurance contributions |
|-----------------------------------|----------------------|-------------------|---|
| Government administrative workers | 90,000 | 90,000 (100%) | 3% of salary (paid by government); the average contribution amounts to D 35,000 |
| Industrial workers | 233,000 | 70,000 (30%) | 3% of salary (2% paid by employer and 1% by employee); the average contribution amounts to D 35,000 |
| Voluntary insured | | | <i>adults</i> |
| - self-employed | 317,000 | 54,000 (17%) | - yearly contribution of D 10,000 for inpatient care only |
| - farmers | 860,000 | 86,000 (10%) | - yearly contribution of D 35,000 for in- and outpatient care |
| | | | <i>children</i> |
| | | | - contribution of D 5,000 for inpatient care only |
| TOTAL | 1,500,000 | 300,000 (20%) | |

A simulation model (Carrin, Sergent and Murray, 1993) was built in order to study the financial implications of alternative scenarios for health insurance development. For instance, the financial implications of the above mentioned membership target rates were studied.

5. FRAMEWORK FOR THE FUTURE DEVELOPMENT OF HEALTH INSURANCE IN VIET NAM

The framework for the future development was discussed during the MOH/WHO Round Table Meeting held at the Ministry of Health in Hanoi, in May, 1996. The Minister of Health, Prof Do Nguyen Phuong, stressed the following points as the major issues to be considered in future development:

1. The development of health insurance is a major social component in the renewal of the health care policy of Viet Nam.
2. Health insurance is a mechanism to improve equity in access to health care.
3. Voluntary health insurance should focus on extension to families, including schoolchildren.
4. Options for health insurance coverage of poor populations should be given priority.
5. The existing health insurance decrees and regulations need to be amended to clarify specific principles, and components such as revenues from contributions.
6. The optimal administrative structures for health insurance policy and operation should be determined, and organization needs to be improved through decentralization.

After the reports and discussions presented during the Round Table, a Plan of Action for health insurance development in 1996 and 1997 was proposed by the WHO team, to be carried out with the financial and technical support of WHO within the framework of IWC. As a major objective, the future development of health insurance is aimed at reaching universal coverage, through an efficient and effective administration at district, provincial and national level, with maximal impact on health status and on the health care system.

The new Plan of Action defines the stated priorities within five major areas: Extension of insurance coverage, strengthening of health insurance revenues, improvement in quality of care, modification of provider payment systems and organizational development. This Plan of Action recognizes the limitations to change due to existing regulations and therefore proposes the development of optimal methods through implementation, monitoring and analysis of pilot projects in select populations and provinces.

Following changes in responsibilities within the Ministry of Health, the Directorate of the Central VHI Office in Hanoi has been designated as the major national counterpart for the continuation of the MOH/WHO Project in health insurance. This Office will also be responsible for the steps to replicate and expand successful and feasible methods to achieve the overall objectives in health insurance development in Viet Nam.

The Plan of Action includes studies in applied health economics and financing as a support to health insurance development in Viet Nam. While emphasis is placed on issues directly related to health insurance, the MOH/WHO Project will continue activities to strengthen health economics capacity within the MOH. Links will also be established with the Management Development Project, funded through IWC, aimed at strengthening MOH management at district and provincial level.

The priority areas within each of the five strategies above are:

A. Extension of coverage:

- Coverage of low-income and very poor populations in urban and rural areas.
- Coverage of family members and schoolchildren of the compulsory insured.
- Coverage of all compulsory insured in the public and private sectors.
- Coverage of mid-level income self-employed.
- Regular reporting system of insured by type of coverage, revenues and expenditure data, by Province.

B. Strengthening of the health insurance revenues/fund:

- Merge of all compulsory, voluntary and school funds at Provincial level.
- Mechanisms to allocate funds for subsidization of low-income populations at national, provincial and district levels.
- Mechanism to allocate funds for training and compliance.

C. Improvement in quality of care:

- Improvement in primary health care at commune health centre level.
- Integration of private doctors in primary health care at commune health centre and district hospital levels.
- Improvement in health care infrastructure and capacity through VHI revenues.
- Definition of benefits to meet needs: including Essential Drug List, prevention, diagnosis and treatment of social diseases, new health care technologies and traditional medicine.
- Development of an information system to support management and quality assurance.

D. Modification of Provider Payment Systems:

Development of provider payment systems compatible with health insurance objectives.

E. Organizational Development

Definition of roles and responsibilities of all policy and operational authorities.

Development of recruitment and training programmes.

Development of coordination and reporting mechanisms between policy and operational authorities.

Development of proposals to support the drafting of legislation and regulations.

A series of activities within these priority areas have been defined for the period beginning October 1996, covering specific issues, target populations and provinces. The targets of these activities are given below, and the activities will be carried out with the financial support of the Government of Luxembourg and SIDA. The Plan of Action includes monitoring and evaluation components which should allow for the replication of positive experiences and successful methods to other provinces, populations and providers.

Activity 1 - Priority Area A

Extension of coverage of all family members of self-employed and farmers in Hanoi, Ninh Binh, Ha Tay and Vinh Phu Provinces.

Activity 2 - Priority Area A

Extension of coverage of family members of compulsory insured workers through a change in contribution based on percentage of salary for the 70,000 workers in the Rubber Company.

Activity 3 - Priority Area A

Extension of coverage of schoolchildren through a comprehensive school health programme in Ho Chi Minh City, to cover 900,000 children.

Activity 4 - Priority Area B

Increased compliance in compulsory health insurance for private sector salaried workers, in Hanoi and Ho Chi Minh City.

Activity 5 - Priority Area C

Improvement in quality of primary health care through the integration of retired military doctors in commune health centres in Ha Tay Province.

Activity 6 - Priority Area C

Improvement in the quality of care through rational drug prescribing and use, in St. Paul Hospital in Hanoi.

Activity 7 - Priority Area D

Cost control and rational expenditure on health insurance benefits through implementation of a capitation payment system for services provided by St. Paul Hospital, Hanoi.

Activity 8 - Priority Area E

Development of a model VHI Provincial Office for demonstration and training in health insurance management, in Ha Tay Province.

Activity 9 - Priority Area E

Development of a VHI Training Programme, with responsibilities for training new staff, training for special subjects and new regulations through a regular training budget, through the Central VHI Office in Hanoi.

...
...
...
...

6. CONCLUSIONS

Health insurance development in Viet Nam is no longer a policy question of how to finance health care. The Government has adopted health insurance as a national policy, and sees the contributions of the population as a long-term approach to reducing government health care expenditure and reaching stability in financing health care. The establishment of VHI provincial offices in all 53 provinces, overall supervision by the central offices in Hanoi and Ho Chi Minh City, and the registration of 7 million insured persons within three years should be seen as remarkable.

Perhaps the major conclusion of the development to date takes the form of a question: at what stage should legislation to achieve universal health insurance be prepared and implemented? On the one hand, the process of starting with a decree rather than law afforded a period of experimentation, flexibility and design of health insurance scheme elements to suit local factors. On the other hand, the strength of the system is severely impaired by the lack of compliance, and the lack of sanctions to deal with compliance in a scheme based on a series of decrees. It would therefore seem that in-depth assessment of the variations in the relevant factors need to be carried out as soon as possible. These factors include contribution levels, registration and contribution payment practices, the merging of funds covering individuals in the same family and local government area, the range of benefits, provider payment and mechanisms to cover vulnerable populations.

With the current availability of data, it should be possible to carry out such assessments within the next year. In parallel, the study of examples of health insurance legislation, initial drafting and preparation for the enactment process can be started. Within this context, several areas should be reviewed. These include:

- the reduction of the minimum number of salaried workers in compulsory insurance from 10 to 5 workers in public and private enterprises,
- compatibility with labour laws regarding the payment of cash benefits for sickness, and health services for occupational diseases and injuries,
- feasible sanctions to deal with non-compliance in the payment of health insurance contributions in the public and private sectors.

In the meantime, the VHI Central Office has recently drafted recommendations for new regulations, and has submitted these to the Government through the MOH. The recommendations call for:

- A Government guarantee to cover any deficit, based on the compulsory membership composition, taking into account particularly the number and

proportion of retired workers.

- Creation of a central fund to subsidize low income provinces and specific populations with low incomes.
- A mechanism for the investment of health insurance revenues.
- An administrative structure for the VHI, as a State organization, with contribution collection functions, and with independent status under the MOH, that is, directly responsible to the Minister of Health.

The above would clarify the status of the VHI as a non-profit State enterprise and fund holder, which are subject to different types of regulations than those governing ministries in Viet Nam. The central function of risk pooling and fund dispersion are also major targets of the recommendations.

The most urgent issue remains the provider payment system. While the extension of coverage to additional populations has repeatedly been given as a priority, some caution is suggested as long as the provider payment problem is not solved. It may be prudent to put greater efforts into changing the provider payment system, and thereby reduce the utilization generated by the current fee-for-service and bonus system, before burdening the provincial VHI offices with the problems involved in contribution collection from individual households (such as self-employed and farmers households).

In the immediate period, the extension of voluntary insurance could therefore concentrate on extension of coverage to family members of compulsory insured persons and school children. The problems of utilization, manifested by extremely high drug prescribing levels in both ambulatory and in-patient hospital care, also need immediate attention. This is clearly not only a provider behaviour issue, but also relates to the expectations of insured patients for sophisticated diagnostic tests and particularly for drugs.

The Plan of Action developed for the next two years places emphasis on the main issues to be resolved. There is consensus on these issues and detailed planning of activities required to reach the appropriate methods was carried out in August 1996. There is agreement on the need to strengthen the capacity of the units dealing with policy and operations of health insurance development. The issue of the locus of responsibility needs to be determined, but the lack of a decision at this point in time need not create a barrier to launching the activities. At this stage, perhaps the most useful approach would be to assure coordination of all the steps with all the partners involved, first within the government and secondly between government and all the international and bilateral development and donor agencies.

BIBLIOGRAPHY

Bui Thanh Chi (1993). **On the research on health insurance of Anh Hai District, Hai Phong City and remarks from a sociological investigation, Hai Phong Health Insurance (unpublished report).**

Carrin G., Sergent F. and Murray M. (1993). **Towards a framework for health insurance development in Hai Phong, Viet Nam.** WHO, Geneva: Macroeconomics, Health and Development Series, No.12.

Nghiem Tran Dung and Do Duy Hien (1992). **Report on preliminary findings about price calculation of health technical services at Dong-Anh District Hospital, Ministry of Health of Vietnam.**

Nghiem Tran Dung and Nguyen Ngoc Chien (1993). **Cost analysis and the average cost calculation of medical technical services in Viet-Tiep Hospital, Hai Phong City, Ministry of Health of Vietnam.**

Nguyen Quang An, Lam Van Trieu and Nguyen Nam Lien (1995), **Services provided to and fees for insured and non-insured patients, Department of Planning and Finance, Ministry of health of Vietnam.**

Perrot, J. and Sergent, F.(1991) **Rapport de mission auprès du Ministère de la Santé (WHO Report), Hanoi, Viet Nam.**

Sergent, F.(1991) **Elements économiques et propositions méthodologiques pour la mise en oeuvre d'une politique opérationnelle de financement de la santé publique au Viet Nam, unpublished WHO Report, Hanoi Viet Nam.**

Tran Van Tien (1996) **Report of medical supervision activities and health care expenditure in the first six months of 1996, VHI Central Office, Hanoi.**

WHO (1995), **World Health Report, WHO Geneva.**