HEALTH CARE FINANCING FOR THE POOR IN LAO PDR

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ABSTRACT

As in many other developing countries, an official policy of user fees was adopted for the Lao health system in the 1990s. In principle, the poor were to be exempted from paying user fees at public health providers. This study aimed to contribute to policy on financial protection of the poor by (1) improving understanding of health care utilization and strategies adopted by households to deal with costs of illness; (2) examining attitudes of policy makers and actual practice of public health care providers on fee exemptions of the poor; and (3) proposing better ways of protecting the poor.

Both quantitative and qualitative methods were employed. Data were collected from 172 households of 4 villages in Savannakhet Province; 26 public providers in Savannakhet Province and 3 public providers in Vientiane Capital; and 22 policy makers in Vientiane Capital, between October 2005 and July 2006.

The exemption policy has been ineffectively implemented. In practice, criteria for identifying the poor were not specified and no budget was provided to hospitals to finance exemptions. Providers preserved exemptions for 'the destitute'. The payment of user fees could be delayed without interest when 'the poor' had insufficient cash. Villagers strongly believed in the principle of paying user fees to providers either at the point of service or through delayed payment, even though they lived in difficult conditions and their average consumption was below $US1.00 a day. Importantly, they did not perceive exemption from fees to be possible for 'the poor'. The majority of households did not access health care services when ill for reasons such as financial and geographical barriers; some of them suffered adverse health consequences as a result such as death or disability. The better the socio-economic group, the better was access to health care services. Among a total of 172 sampled households, twelve households were faced with catastrophic health expenditure, most from the middle and poorest socio-economic group. The villagers managed health crises themselves mainly through drawing on social networks within the community in order to sell assets, borrow, and get other forms of support from neighbours. Although the study of households was small in scale, it was likely to echo households' difficulties elsewhere as the studied villages were similar to other rural areas without roads of Lao PDR.

This study suggests that there is an urgent need for the government to improve two main areas: accessibility to adequate health care for everyone, everywhere; and reform of the nationwide policy on health financial risk protection for the poor and the less-poor in order to reduce catastrophic health expenditure.

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The thesis allowed me to gain an insight into poverty. I genuinely appreciate the local wisdom and endurance of the people who live in rural areas of Lao PDR, especially villagers of the sampled villages in the study. I am deeply grateful for their generosity, hospitality and cooperation during the fieldwork. Special thanks are due to Dr. Kongsap, Dr. Pranom, Dr. Ounheun, Dr. Sisomxai, Miss Kaewlanee, Savannakhet provincial health office and the National Institute of Public Health. Their coordination made a success of the field study. I am grateful for the kind cooperation of all the interviewees and key informants who were policy makers and health care providers. My thanks are due to friends in London, particularly Thai and Japanese students and friends in room 105, 51 Bedford and thanks to Julia Mortimer who cheerfully improved my English by many means including lunch at her house and Christmas Day with her warm family.

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TABLE OF CONTENTS

ABSTRACT 2
ACKOWLEDGEMENT 3
TABLE OF CONTENTS 4
LIST OF TABLES 9
LIST OF FIGURES 12
LIST OF BOXES 13
LIST OF ABBREVIATION 14
DECLARATION OF CANDIDATE'S ROLE IN THE RESEARCH INVESTIGATION 15

CHAPTER 1: INTRODUCTION 16

CHAPTER 2: LITERATURE REVIEW 20
2.1 User fees 20
2.1.1 What are user fees? 20
2.1.2 What is the purpose of user fees in theory? 21
2.1.3 Arguments for and against user fees in practice 23
2.2 Protection mechanisms within user fee policy 27
2.2.1 Equity when introducing user fees 27
2.2.2 Targeting protection against user fees 28
2.2.3 Process of implementing and performance of targeting mechanisms 31
2.2.4 Mechanisms to protect the poor within user fee policy 35
2.3 Asian experience on user fees and protecting the poor 38
2.4 Protection mechanism for the poor towards health insurance 42
2.5 Concluding remarks 46

CHAPTER 3: RESEARCH OBJECTIVES AND METHODOLOGY 47
3.1 Aim and objectives 47
3.2 Development of the methodology 48
3.2.1 Theoretical framework 48
3.2.2 Conceptual framework of this study 53
3.3 Study setting 55
3.4 Methodology 61
3.4.1 The first sub-study: household side 63

5.4.2 Treatment seeking pattern related to person admitted in the previous twelve months 128
5.4.3 Treatment seeking pattern by wealth groups 133
5.5 Costs of treatment for outpatient care and related to admission 134
5.5.1 Mean cost of OP treatment 135
5.5.2 Mean cost of services related to admission 137
5.5.3 Mean cost for OP treatment and admission-related treatment by wealth groups 139
5.6 Discussion 140
5.6.1 Discussion of methodology 140
5.6.2 Overview of findings 142
5.6.3 Discussion of findings 145
5.7 Concluding remarks 150

CHAPTER 6: COST BURDENS AND HOUSEHOLD COPING STRATEGIES 151
6.1 Introduction 151
6.2 Methodology 151
6.3 Cost burdens and catastrophic health expenditure 153
6.4 Illness pattern from household in-depth interviews 156
6.5 Level of catastrophic health expenditure and its consequences 158
6.6 Coping strategies 163
6.6.1 Cost prevention strategies 163
6.6.2 Cost management strategies 166
6.7 Households' perception on user fees and exemptions 173
6.7.1 Households' perception on user fees 173
6.7.2 Households' perception on exemptions 176
6.8 Discussion 178
6.8.1 Discussion of methodology 178
6.8.2 Overview of findings 182
6.8.3 Discussion of findings 184
6.9 Concluding remarks 189

CHAPTER 7: USER FEE AND EXEMPTION POLICY IMPLEMENTATION 190
7.1 Introduction 190
7.2 Methodology 190
7.3 The context and content of user fee and exemption policy in Lao PDR.... 192
7.3.1 The context of systems of user fees in Lao PDR before 1995 192

7.3.2 The content of the user fee and exemption policy (Decree52 PM) 195
7.4 The user fee and exemption policy (Decree 52 PM) in practice 197
7.4.1 Promulgation of Decree 52 PM 197
7.4.2 Expectation and implementation of Decree 52 PM 199
7.4.3 Fee schedule 200
7.4.4 Role and profile of revenue generated from user fees in providers 202
7.4.5 Use of revenue generated from user fees 205
7.4.6 Exemptions from paying user fees 215
7.4.7 Monitoring and reporting system 223
7.5 Discussion 225
7.5.1 Discussion of methodology 225
7.5.2 Overview of findings 227
7.5.3 Discussion of findings 229
7.6 Concluding remarks 234

CHAPTER 8: IMPROVING HEALTH FINANCIAL PROTECTION OF THE POOR 236
8.1 Introduction 236
8.2 Methodology 238
8.3 Framework for the analysis 239
8.4 The analysis 241
8.4.1 Current context of health insurance scheme in Lao PDR 241
8.4.2 Who is the poor? 243
8.4.3 Provider payment method 247
8.4.4 Financial requirements to serve the poor 247
8.4.5 Financing sources to support the poor 248
8.4.6 Protecting the less-poor 253
8.4.7 Health financial risk protection for all 254
8.4.8 Prerequisites for the further development and implementation of the proposed financing model 255
8.5 Overview of the analysis 260
8.6 Discussion 261
8.7 Concluding remarks 265

CHAPTER 9: DISCUSSION **266**
9.1 Introduction 266
9.2 Methodological issues 266
9.2.1 Quantitative methods 267
9.2.2 Qualitative methods 270
9.2.3 Broader methodological issues 272
9.3 Overview of findings 276
9.3.1 Health service utilization and financial implication for households 276
9.3.2 The exemption policy implementation and providers' responses 277
9.3.3 Improving financial protection for the poor and the less-poor 278
9.4 Discussion of findings 279
9.4.1 Health service utilization and financial implication to households 279
9.4.2 The exemption policy implementation and providers' responses 282
9.4.3 Improving financial protection for the poor and the less-poor 285

CHAPTER 10: CONCLUSIONS **289**
10.1 Conclusions of findings 289
10.2 Policy recommendations 292
10.3 Contribution to knowledge 296
10.4 Further research in Lao PDR 299

REFERENCES 301

APPENDIX I Tools of the study 314
APPENDIX II Heading and sub-heading for qualitative analysis 361
APPENDIX III Health care cost burden of household 363
APPENDIX IV Decree 52 PM (Lao version) 367
APPENDIX V Decree 52 PM (English version - informal translation) 371

LIST OF TABLES

Table 2.1	Main arguments for and against the potential welfare-enhancing effects of user charges	24
Table 2.2	Overview of the Two Primary Targeting Mechanisms	30
Table 2.3	Leakage and under-coverage in the application of targeting	32
Table 2.4	Main features of design and implementation of targeting mechanism that affect performance	33
Table 2.5	Performances of CBHI on financing sub-functions	45
Table 3.1	Sub-studies: objectives, methods, samples and result chapters	62
Table 3.2	Information on 14 district hospitals in SVK province, FY 2004, for choosing study sites	64
Table 3.3	Four sampled villages in two districts for the first sub-study: household side	65
Table 3.4	FGD member of four villages	71
Table 3.5	Wealth group and type of illness of 29 households' in-depth interview	72
Table 3.6	Sampled public health facilities for the second sub-study	75
Table 3.7	List of key informants on policy maker perspective	80
Table 3.8	Two one-day workshops at the end of the fieldwork	81
Table 4.1	General information on the four villages	93
Table 4.2	Health facilities of the villages	97
Table 4.3	Some indicators of maternal and child health in the villages	98
Table 4.4	Household wealth ranking by three FGDs in each village	100
Table 4.5	Mean household consumption and profile of non-food and food consumption from consumption survey of sampled households	101
Table 4.6	Asset index score of three wealth groups in the four villages	102
Table 4.7	Factor score of each indicator in the first principal component and proportion of indicator among three groups	103
Table 4.8	Food insecurity of the four villages in the year 2004	106
Table 4.9	Summary indicators of the four villages	111
Table 4.10	Indicators of the four villages compared to the rural areas without access to road from the LECS III	112
Table 5.1	Individuals reporting illness, service use for OP treatment and admission	118
Table 5.2	Reported illness, use of OP treatment and admission by wealth group	121
Table 5.3	Treatment seeking pattern for illness in the previous two weeks	124

Table 5.4	Treatment seeking pattern related to the last admission in the previous twelve months	129
Table 5.5	Mean direct costs for outpatient treatment by village and type of provider	136
Table 5.6	Mean direct costs associated with admission by villages and type of provider	138
Table 5.7	Mean direct costs across wealth groups reporting OP treatment and treatment related to admission	139
Table 6.1	Household cost burden by villages	153
Table 6.2	Household cost burden by wealth groups	154
Table 6.3	Household catastrophic health expenditure by villages and wealth groups	154
Table 6.4	Summary of information from in-depth interviews	157
Table 6.5	Coping mechanisms to deal with cost of OP treatment and admission	167
Table 6.6	Illustration of the sensitivity of catastrophic health expenditure to its definition	180
Table 7.1	Code and summary data of policy makers and providers including methods used	191
Table 7.2	Main contents of Decree 52 PM	196
Table 7.3	Fee schedules of seven district hospitals in SVK Province	201
Table 7.4	Fee schedules of nine health centres in SVK Province	201
Table 7.5	Revenue of SVK Provincial Hospital by sources of revenue	202
Table 7.6	Revenue of district hospitals in SVK Province by sources of revenue	203
Table 7.7	Obligatory remittances compared to total user fee revenues in the hospital and features of obligatory remittances	207
Table 7.8	Achievement of remitting the obligatory remittance and attitude of hospital staff	209
Table 7.9	Quotations from providers in SVK Province according to obligatory remittance in the future	211
Table 7.10	Expenses from user fee revenue of one provincial hospital and 11 district hospitals, SVK Province during the fiscal years 2001-2005	214
Table 7.11	Difference of exemptions figure between PHO financial report and report at hospital level	217
Table 8.1	Health insurance funds in Lao PDR according to 'the Curative Law'	243
Table 8.2	Scenario of who will be identified as 'the poor'	246
Table 8.3	Financial requirements to serve the poor	248

Table 8.4	Revenue and expenditure of the Lao government in fiscal year 2001 – 2005	249
Table 8.5	Average OP and IP services of hospital in SVK Province, 2001-04	257
Table 8.6	Practical strategies for managing fee removal	262
Table 9.1	The determinants limited the success of Decree 52 implementation	283
Table 9.2	Characteristics of the two schemes for the poor and the less-poor compared to a common concept of community-financing	287
Table 10.1	Policy recommendations based on lesson learnt from the implementation of Decree 52 PM	295

LIST OF FIGURES

Figure 2.1	An individual's demand for health care	21
Figure 2.2	Steps in the adoption of targeting mechanisms	31
Figure 2.3	An idealized view of promoting access for the poor within user fees	35
Figure 3.1	The determinants of supply and demand for health services operate through many channels	49
Figure 3.2	Health Care Utilization Model: An Initial Model (1960s)	50
Figure 3.3	The Health Care Utilization Model: An Emerging Model - Phase 4	51
Figure 3.4	Conceptual framework of health care services, financing and exemptions from perspectives of policy maker, and supply and demand sides	54
Figure 3.5	LAO PDR: 72 Districts Identified as Poor	60
Figure 3.6	Methods used to quantify household consumption in a village	74
Figure 3.7	Diagram of samples and methods for this study	83
Figure 4.1	Model of mapping of the four villages	92
Figure 4.2	Tak-Tak, the preferred transportation of the villagers	94
Figure 4.3	Drought in KK village	94
Figure 4.4	Temporary shed for delivering	98
Figure 4.5	BCG and DTP3 coverage in the villages	99
Figure 4.6	Asset index score and wealth group of each household in the villages	104
Figure 5.1	Outpatient treatment seeking patterns of villagers who reported illness in the previous two weeks	125
Figure 5.2	Treatment seeking patterns of admissions in the last 12 months	132
Figure 5.3	Distribution of treatment options (% of total actions)	133
Figure 5.4	Profile of financial cost of all 38 people admitted	135
Figure 5.5	Rates of illness, use of OP treatment and admission among districts, villages and wealth groups	143
Figure 6.1	Summary of main findings from the household census	182
Figure 7.1	Profile of revenue from user fees in provincial and 14 district hospitals, SVK Province, fiscal year 2005	204
Figure 7.2	Exemptions provided to different group of patients during the fiscal years 2002-2005	218
Figure 8.1	Four key actors and functions of health system	239
Figure 8.2	Some indicators on government budget in fiscal year 2001-2005	250
Figure 8.3	Model of health financial risk protection for the entire population	254

LIST OF BOXES

Box 6.1	Household TAL 7	159
Box 6.2	Household TAL1	160
Box 6.3	Household TAL 8	161
Box 6.4	Household SPX 6	164
Box 6.5	Household TAL 4	165
Box 6.6	Household KK 4	169

LIST OF ABBREVIATIONS

APT	Atsaphangthong
CBHI	Community Based Health Insurance
CREHS	Consortium for Research on Equitable Health Systems
DHO	District health office
FGD	Focus group discussion
IHPP	International Health Policy Programme
KK	Kok Kong
KY	Kayong
LA	Local administrator
LDC	Least Developed Country
LECS III	Lao Expenditure and Consumption Survey III
LICS	Low Income Card Scheme
MDG	Millennium Development Goal
MOF	Ministry of Finance
MOH	Ministry of Health
NGO	non-governmental organization
NGPES	National Growth and Poverty Eradication Strategy
OOP	Out-of-pocket
OP	Out patient
PCA	Principle Component Analysis
RA	Research assistant
RDF	Revolving Drug Fund
SPX	Sisapanxai
SVK	Savannakhet
TAL	Tang A Lai
VTE	Vientiane
WHO	World Health Organization

3.4.2 The second sub-study: public health care providers 75
3.4.3 The third sub-study: policy maker perspective 79
3.4.4 The workshop after the completion of the fieldwork 81
3.4.5 The fourth sub-study: improving protection of the poor 82
3.4.6 Overview 83
3.5 Data processing and data analysis 84
3.5.1 Quantitative data 84
3.5.2 Qualitative data 84
3.6 Quality control of the study 85
3.6.1 Potential biases from the researcher, RA and health staff 85
3.6.2 Validity and reliability 86
3.7 Limitations of the study 88

CHAPTER 4: HOUSEHOLD WELL BEING 90
4.1 Introduction 90
4.2 Methodology 90
4.3 Characteristics of the four villages 92
4.3.1 Living conditions of the villagers 92
4.3.2 Characteristics of health facilities 95
4.3.3 Basic maternal and child health services 98
4.4 Poverty assessment 99
4.4.1 Wealth groups 100
4.4.2 Household consumption 101
4.4.3 Asset index 102
4.4.4 Food security 105
4.5 Discussion 107
4.5.1 Discussion of methodology 107
4.5.2 Overview of findings 110
4.5.3 Discussion of findings 112
4.6 Concluding remarks 116

CHAPTER 5: HEALTH SERVICE UTILIZATION 117
5.1 Introduction 117
5.2 Methodology 117
5.3 Illness and health service utilization 118
5.4 Treatment seeking patterns 122
5.4.1 Treatment seeking pattern for illness in the previous two weeks... 122

DECLARATION OF CANDIDATE'S ROLE IN THE RESEARCH INVESTIGATION

The research investigation reported in this thesis was conceptualized, analyzed and written up myself while I was a PhD student at the London School of Hygiene and Tropical Medicine.

Primary data collection from households was done by the candidate with assistance from a research assistant and a local administrator. Data collection from public providers was done by the researcher with logistical support from the research assistant. Data collection from policy makers was conducted in collaboration with partners of the National Institute of Public Health (NIOPH) who aimed to collect data on policy formulation while the candidate focused on policy implementation. The workshop after the completion of the fieldwork was held for the two linked studies. One was the formulation of the user fee and exemption policy, done through collaboration between NIOPH and the International Health Policy Programme (IHPP – Thailand) with support of the Consortium for Research on Equitable Health Systems (CREHS) of the London School of Hygiene and Tropical Medicine. The workshop was funded by the scholarship that the candidate received from the Dorothy Hodgkin Postgraduate Award. The entire investigation as reported here is my own work, with support provided by my supervisor, Prof. Anne Mills. Some advice and support came from Lucy Gilson, Professor of Health Policy and Systems, the University of Cape Town and London School of Hygiene and Tropical Medicine and Dr. Viroj Tangcharoensathien, the director of the IHPP-Thailand.

[redacted]

Walaiporn Patcharanarumol

I confirm the accuracy of the above statement.

Professor Anne Mills
Supervisor
24 January 2008

CHAPTER 1
INTRODUCTION

The poor and the health of the poor have received an increasing amount of attention not only in the literature worldwide but also in the international policy agenda recently (Yazbeck et al. 2005). Resource poor settings tend to have worse health outcomes than better-off setting countries. Within the same area, poor people have worse health outcomes than better off people (Wagstaff 2002). Poverty is both a cause and effect of ill health (WHO 2001). The poor often have inadequate resources to pay for health services and ill health can push them further into the poverty trap.

Many developing countries have adopted user fees in their health care financing systems with an argument that user fees would enhance the effectiveness and equity in health services by generating more revenue, reducing frivolous demand, and improving quality (Newbrander et al. 2001). User fees in the public sector and out of pocket payments in the private sector are currently the main source of health services financing in some countries, especially low income countries (Musgrove et al. 2002; Poullier et al. 2002). However, out-of-pocket financing is not an equitable source of financing. Where there is a lack of provision to grant partial or full waivers to the poor, user fees provide a financial barrier which leads to inequity in access to health care services (Newbrander et al. 2001). This is a dilemma of user fees.

With the intention of making user fees achieve the policy aims of raising revenue, improving health system efficiency and enhancing equity in access to the health system, the mitigation of the impact of user fees on access to health services by the poor is important. Exempting the poor from paying user fees is a critical issue in the debate over user fees. If the poor are effectively exempted, then many criticisms of user fees drop away. The ideology of price discrimination - the rich pay for health services, thereby generating adequate revenue to improve quality, whilst the poor have proper access to health services via reduced or non-existent user fees – could be achieved, if exemptions work well. However, the experience suggests that a policy of exempting the poor from paying user fees has generally not been effective (Gilson et al. 1995) for many reasons. Frequently, there is a substantial conflict between effective exemptions and the objective of raising revenue from user fees as long as providers

mainly rely on income from fees. This problem can be substantial, especially in low-income countries where a majority of the population may be the poor who deserve exemption.

User fees combined with an ineffective exemption system, in addition to the unpredictable nature of healthcare, could lead to financial hardship of households through paying fees at health care providers. It can impose catastrophic health expenditure on households. The households that access healthcare would employ strategies to cover user fees. These can be risky and potentially plunge households into poverty or push indigents deeper into chronic poverty (WHO 2005).

This study has its main focus on how and why the exemption mechanism succeeded or not in protecting the poor from paying user fees in the public health sector of the Lao Peoples' Democratic Republic (Lao PDR), one of the world's least developed counties (United Nations Development Programme, 2006). In the context of the current situation of health care financing in Lao PDR, the study aims to contribute to health financing policy on how to improve protection of the poor from health expenditure. Three key stakeholders namely households, public health care providers and policy makers, were studied. The study scrutinizes households' health care utilization patterns, illness costs, and coping strategies to deal with illness costs, including receiving exemptions. The study assesses the implementation of a national policy on fee exemption of the poor from public health care providers' and policy makers' perspectives. Subsequently, according to evidence from the study combined with reviews of relevant documents, the study makes suggestions which contribute to debates about how to improve health financial risk protection to the poor in Lao PDR in particular, as well as developing countries in general.

The rest of this thesis is organized into nine chapters (chapter 2-10) as follows;

Chapter 2 reviews relevant literature on user fees; what are user fees, their features and objectives and arguments pro and con user fees. Protection mechanisms, especially exemptions to the poor, are reviewed with equity as the main concern. Community financing is reviewed as providing other options for protecting the poor. Subsequently, gaps of knowledge are identified in the last section.

Chapter 3 presents the aims and objectives of the thesis. Literature on models of the determinants of supply and demand, health care utilization and household coping strategies to deal with illness costs are reviewed in this chapter in order to develop a conceptual framework for the thesis. This chapter also summarizes the study setting. Methods used in this study are presented by four sub-studies; (1) households' perspective, (2) public providers' perspective, (3) policy makers' perspective and (4) an analysis for improving health financial risk protection.

Chapter 4 provides background information on the household sites for instance location of the four selected villages in the districts and the province, general living conditions and availability of health care facilities. The second half of the chapter presents the main findings of the poverty assessment of the villagers from four parameters: wealth groups, household consumption, asset index and food security.

Chapter 5 examines information from all 172 households in the four sampled villages in terms of reported illness, utilization of outpatient (OP) treatment, admission, and direct financial cost of treatment. These variables are presented by villages and by wealth groups.

Chapter 6 presents data for all 172 households on the cost burden of treatment costs on monthly household non-food consumption and coping strategies adopted by the households to deal with costs of treatment. Household catastrophic health expenditure is identified. Qualitative data are provided for better understanding of the economic consequences on households due to illness. In addition, the chapter addresses the perceptions of households on user fees and exemptions at public health providers.

Chapter 7 describes the national policy on user fees and exemption (known as Decree 52 PM) from the viewpoint of policy makers and public providers at all levels of the country from the national level to community level. The chapter examines public health care providers' behaviour and attitudes on exemption mechanisms and the perceptions and preferences of national policy makers on fee exemption policy and implementation.

Chapter 8 aims to recommend a financing model which can improve health financial protection to the people, and draws together the findings from the study, the literature review and the current context of health care financing in Lao PDR. The analysis suggests financing options for better protecting not only the poor but also the less-poor. This chapter analyses the financial implications of alternative protection mechanisms applying geographical and direct targeting.

Chapter 9 discusses the strengths and weaknesses of the research design and the methods employed by the study. The main findings are summarized and then discussed.

Chapter 10 presents substantive conclusions of the study and provides policy recommendations. The chapter identifies how the study contributes to knowledge and suggests further research.

CHAPTER 2
LITERATURE REVIEW

The aim of this chapter is to review the literature on user fees and protection mechanisms. In the first section, user fees in theory and practice are reviewed in order to understand what user fees are meant to achieve, their features and the arguments for and against them. Protection mechanisms, focusing on targeting, are explored in the second section. The third section presents examples of three countries, namely Cambodia, Thailand and Vietnam on user fees, exemptions and other types of protection mechanisms. The fourth section reviews another form of protecting the poor, focusing on community based health insurance. Its potential to protect the poor is explored. Knowledge gaps, as revealed in the literature review, are identified in the final section.

2.1 User fees

This section outlines the theory of user fees, the three main objectives of user fees, and the arguments for and against such a system in practice.

2.1.1 What are user fees?

Newbrander et al. (2000) define user fees as payments made by individuals or families in exchange for the use of health services and goods: this is sometimes called cost sharing or cost recovery. Health systems charge user fees in order to access private resources to help finance their services and to improve the efficiency of utilization. The type and form of user fees vary from a usual fee for each service provided (fee-for-service) to fees based on an episode of illness or per case. Co-payments made by patients under prepaid insurance systems are not considered user fees in this definition.

User fees in this study refer to out-of-pocket payments, out of pocket from patients at the point of service delivery for buying public health care services with whatever form of charge and at whatever level of public health care provision.

2.1.2 What is the purpose of user fees in theory?

Most of the literature indicates three purposes of user fees which are: to improve *efficiency*; to improve *equity;* and to generate *more revenue* for the health care system. User fees can have both efficiency and equity benefits for health care systems (Gilson 1997). User fees are recommended in two situations. Firstly, they can be introduced as a way of improving efficiency when health expenditure is high. Secondly, they are recommended as a way to mobilize more resources into health systems than currently exist (Creese 1997). The three purposes of user fees are discussed in terms of theoretical concepts in the following sections.

Efficiency improvement

Demand for health care can, in theory, be analysed like the demand for other goods and services (McPake et al 2002). The law of demand in economic theory indicates that 'other things remaining the same, the higher the price of a good, the smaller is the quantity demanded' (Parkin et al. 2000). Figure 2.1 illustrates an individual's demand curve for health care.

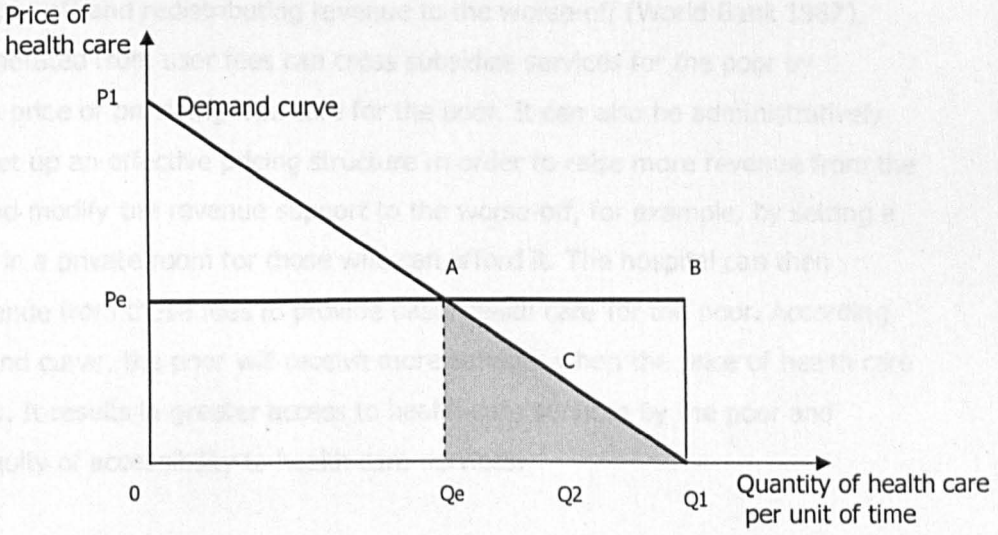


Figure 2.1 An individual's demand for health care

According to the demand curve, once health care services are free (price is equal to zero), the highest demand on health services arises which might be due to patient needs or frivolous health care usage or careless resource consumption. When user fees

are introduced, it has been argued that patients will be concerned about appropriate use and cost effectiveness of health care services and this leads to efficiency of the health care system (World Bank 1987).

Assuming market price of Pe, the optimal point of consumption and provision of services can be defined as the point at which demand, representing marginal benefit, equals price, representing marginal cost, Qe on figure 2.1, i.e. where marginal benefit equals marginal cost. The inefficiency of zero price in comparison with a perfect market can be represented by the shaded triangle AQeQ1. The amount of over consumption is represented as Qe - Q1. This over consumption results in a welfare loss to society represented by the area ABQ1. For instance, the benefit of care consumed at Q2 is defined by the distance between Q2 and C while the cost of care is Pe. The existence of positive externalities shifts the demand curve outwards, justifying a subsidy to the point where marginal social benefit equals the price.

Equity improvement

In theory user fees can improve the equity of the health care system by collecting fees from the better-off and redistributing revenue to the worse-off (World Bank 1987). Revenue generated from user fees can cross subsidize services for the poor by reducing the price or providing free care for the poor. It can also be administratively feasible to set up an effective pricing structure in order to raise more revenue from the better-off and modify the revenue support to the worse-off, for example, by setting a higher price in a private room for those who can afford it. The hospital can then allocate revenue from these fees to provide basic health care for the poor. According to the demand curve, the poor will receive more services when the price of health care services falls. It results in greater access to health care services by the poor and enhances equity of accessibility to health care services.

Revenue generated

Another objective of user fees is to raise more revenue in the health care system. In a World Bank Policy Study (1987), the World Bank proposed *four policy reforms.* The first promoted the adoption of user fees for health care in the public health sector of developing countries with three main objectives. The first objective of introducing user fees was to raise additional money while efficiency improvements and improving

equitable access to health care for the poor were second and third objectives (World Bank 1987). In the public health sector, user fees are usually introduced or increased to supplement public funds when public funds cannot cover the cost of providing services. Sometimes user fees are set up in a health system for a particular reason, for example, to generate cash for drugs procurement in a health facility (Newbrander et al 2001) as well as to operate revolving drug funds which is the case in Vientiane Capital, Lao PDR (Murakami et al. 2001). Increasing revenue from user fees can also support quality improvement if it ensures an adequate financial flow for drug procurement and stocks in hospitals.

2.1.3 Arguments for and against user fees in practice

The purposes of user fees were confirmed by an international survey of health service user fees in 26 low- and middle-income countries (Russell and Gilson 1995). Respondents from all countries identified several policy objectives of user fees, the most common being to raise revenue (80%) and improve service quality (62%). Other objectives were: extending service coverage (around 55%), discouraging unnecessary visits (around 38%) and encouraging appropriate use of referral systems (around 35%). The objectives of improving service quality and extending service coverage were related to equity improvement. The objectives of discouraging unnecessary visits and encouraging appropriate use of the referral system were related to efficiency improvement.

Although most articles agree with the three broad objectives of introducing user fees to health care systems, some main arguments for and against the welfare- enhancing effects of user fees are shown in table 2.1.

Table 2.1 Main arguments for and against the potential welfare-enhancing effects of user charges

Potential sources of welfare gain	Supporting-arguments	Counter-arguments
Efficiency improvements	• Encourage rational utilization of services among users by (i) limiting the use of services for 'frivolous' or 'unnecessary' reasons; (ii) reducing patients' inappropriate use of referrals; (iii) curbing moral hazard behaviour. • Increase the degree of accountability which service providers have towards community.	• Many patients are not in a position to judge the seriousness of their symptoms and their medical needs. • Most unnecessary utilization may have already been curbed by high indirect costs of accessing services. • User charges do little to curb the unnecessary use by the affluent groups. • In the presence of information asymmetry and incomplete agency relationship between the provider and patient, user charges penalize patients for decisions made by providers over which the patient has little or no discretion.
Improving equitable access	• User charges plus quality improvements make the government health centres more attractive to all income groups as retained revenues and the freed government budgetary resources are used to increase coverage and quality of services, especially those used by the poor. • The demand for medical services is not generally sensitive to changes in price levels. • It is administratively feasible to formulate and implement an effective pricing and collection mechanism that protects the poor. • Many households are able and willing to pay moderate user charges for services of perceived quality and these charges are less likely to impose undue burden on household resources.	• Where part of the fee revenue is retained by local facilities and used appropriately, it allows for only small improvements in coverage and quality. • User-financing does little to improve the health status of the poor, particularly the rural poor, as long as the existing resource allocation within the health sector continues to favour urban, facility-based, curative services. • Fees deepen regional inequality in favour of populated and rich regions. • Money prices influence households' choice and utilization of health care services and the demand of low-income households is more sensitive to price changes than the demand by other households. • There are considerable informational, administrative, socio-cultural and political constraints that tend to undermine the implementation of an effective exemption scheme. • Some households, especially the poor and chronically ill who persist in paying with the greatest difficulty may do so by diverting funds from the purchase of food and other basic necessities or selling off a productive asset vital for the future well being of the household and its members. • A willingness to pay for traditional care may not indicate a willingness to pay for allopathic care if these two types of care are perceived not to be substitutes for all groups of illness.

Potential sources of welfare gain	Supporting-arguments	Counter-arguments
Raising additional money	• Increase the financial resources of the health sector by (i) shifting part of costs to the users and (ii) freeing resources as 'frivolous' or 'unnecessary' use of services is curbed. • Moderate user charges increase revenues assuming that the demand is price inelastic and the cost of designing and implementing an effective user charge system is negligible. • Collected fee revenues are retained in the local health facilities allowing for (i) noticeable improvements in coverage and quality of services in the short-term: (ii) reorientation of government resources away from curative toward preventive care in the long term. • Make the health sector financially more self-sufficient and insulate health sector from contractions in government budgets. • Encourage community-participation in decision making in areas affecting the health-status of the community members.	• The revenue-raising potential of user charges has proven to be mixed in practice and generally well below the expected 10-20 per cent of total government recurrent health expenditure. • The revenue-generating potential of user charges is severely constrained in practice by several factors, including weak administrative and management capacity, seasonality in the availability of cash, and the absence of a credit system. • Collected fee revenues are rarely fully retained locally and where they are retained there are few institutional arrangements in place to ensure that these resources are used effectively. • The resources generated through user financing may lead to central government substitution away from the health sector. • User charges are often imposed on communities with little or no prior consultation.

Source: Sepehri and Chernomas (2001)

Raising revenue can be achieved only if there is demand for the health services for which fees are charged and if the system is able to deliver those services. If there is little demand for the services or if the demand is highly elastic (that is sensitive to price changes[1]), then charging user fees will generate little additional revenue. Although the political objective and some particular reasons for user fees are to generate more revenue, it is important to recognize that the total amount of revenue generated is unlikely to be sufficient to meet the growing need and demand for high-quality health care due to several factors as mentioned in the above table. Net revenue from user fees is on average only 5 percent of operating costs and is inadequate to alter current quality of services (Russell and Gilson 1997). However, the net revenue from user fees may represent a significant proportion of non-labour recurrent costs (Creese and Kutzin 1995).

[1]**Price elasticity of demand** is a measure of the responsiveness of demand to changes in the price of the product. A high price elasticity of demand shows that purchasers are price sensitive, whereas a low price elasticity of demand shows purchasers are less sensitive to price. Mathematically, the own price elasticity of demand (OP_{ed}) is calculated as follows: OP_{ed} = % change in demand / % change in price

Some early studies of the empirical evidence using econometric demand models to predict the elasticity of demand for health care showed that medical demand in terms of amount of utilization is inelastic to the price (Heller 1982). But these models did not adequately explore price elasticity of demand by income group. Later studies on demand models which looked at this found that the poor are sensitive to prices and less able to pay higher prices (Ching 1995). Since the poor are less able to pay higher prices, they reduce utilization proportionately more than the rich. This is supported by empirical evidence using various study methods. A field experiment comparing utilization before and after the introduction of fees found that poor households in Bangladesh, especially the landless, reduced access to medical care after user fees were introduced in public health care services (Stanton and Clemens 1989). Information from a cross-sectional survey of the rural poor in Northern Vietnam shows that after introducing user fees at community and district level, the poor in poorer communes were most affected by user fees (Ensor and San 1996). The poor generally delay treatment, make less use of government health facilities, and pay more for each episode of illness than the rich. One study of articles searched since 1995 on the impact of various health care financing systems on access to medical services in low income countries concludes that, in general, user fees deterred utilization in many settings, although it is often unclear to what extent and what kind of use is most affected (Palmer et al. 2004).

User fees not only affect demand for health services. A critical aspect of user fees is when patients must pay cash for health services. It can have a significant impact on their care-seeking behaviour, especially if they are poor (Russell 1996). It can also undermine households' economic circumstances. User fees increase the probability of catastrophic health spending by households, which has been defined as 40 per cent of non-food income, and it occurs disproportionately among the poor (Xu et al. 2003).

2.2 Protection mechanisms within user fee policy

This section reviews literature related to protection mechanisms, mainly focusing on targeting, under a user fee system. The section starts by considering the equity aspect in order to provide general background on the importance of providing protection to the vulnerable group to user fees. The following sub-sections present types of targeting, the process of implementing the targeting mechanism and its performance evaluation. The last sub-section emphasizes the mechanisms designed to protect the poor under user fees.

2.2.1 Equity when introducing user fees

Generally, the concern of equity is interpreted as providing basic health services to all (Braveman and Gruskin 2003). But equity is about fairness and unequal may be judged to be fair. In health care it may be judged equitable to have unequal access to services, for example people who are more likely to be ill should have more opportunity to access medical services. Two definitions of equity, horizontal and vertical equity, should be described in term of their dimensions (Donaldson and Gerard 1993). Horizontal equity is concerned with equal treatment for equal need. The most common types of horizontal equity are equality of expenditure, utilization and access. Vertical equity is concerned with unequal treatment for unequal need. People who are unequal in society should be treated differently.

The World Health Organization defines equity as "equal access to available care for equal need, equal utilization for equal need, and equal quality of care for all" (WHO 1999). The term access refers both to financial access and geographical access.

WHO's description of *what is necessary for equity* supports the importance of equity as a principle of social justice and fairness: striving for equity in health and health care means doing what is necessary to (1) reduce avoidable, unfair, and unjustifiable differences in health status, health determinants, and risk factors; (2) improve access to and utilization of quality health care services by all population groups according to need; and (3) create an enabling intersectoral policy and resource environment for

establishing and sustaining equity in health and health care as a national development policy (WHO 1998).

The greatest risk in introducing user fees is that the poor and vulnerable may be limited or prevented from accessing the health services they need, based on their financial circumstances.

2.2.2 Targeting protection against user fees

The purpose of targeting is "to concentrate resources on those who need them most" (Newbrander et al. 2000). Targeting is a response intended to maintain equity by shielding these populations from some or all of the fees imposed for health services.

Different authors have offered different typologies of targeting methods. Grosh (1995) recognized three main methods: individual assessment mechanisms, group or geographic targeting and self-targeting. Newbrander et al. (2000) identified three methods: direct targeting, characteristic targeting and self-targeting which meant the same as Grosh's methods. Willis and Leighton (1995) distinguished between two types of targeting: characteristic targeting (equivalent to Grosh's group targeting) and direct targeting (based on direct individual or household assessment). Bitran and Giedion (2003) classified four categories of targeting, (a) Individual identification (b) Identification based on group characteristics (c) Self-identification (d) Self-selection by type of service, plus one untargeted programme namely universal provision. However, it was indicated that universal provision is too costly and fails to have much impact on poverty and that targeting can promote cost-effectiveness.

Protection mechanisms relevant to this review rely on three main methods of targeting, as categorised by Newbrander et al (2000).

Direct targeting is the provision of free or reduced-price benefits to people who cannot pay because of their low income. It involves identifying specific patients or families who cannot afford to pay the full or even partial fee for health care. Identifying these individuals requires determining their ability to pay by examining external evidence, a process called "means testing". When an individual is shown by a means test to have

an income that falls below the income level set by policy, he or she is eligible for free or partially subsidized health services.

Means testing is time-consuming and costly. It can be done by using actual information on income and wealth or using proxy information or other processes. For example, in Thailand the low-income card scheme is means tested using a local committee's assessment of the applicant's wealth (Gilson et al. 1998).

Characteristic targeting is the provision of free or reduced-price benefits to people with certain attributes, special circumstances, or special needs regardless of income level (e.g. certain contagious illnesses or vulnerable groups, such as children). Exemptions are the means of applying characteristic targeting. This form of targeting may cover some of the poor but does not directly target the poor for benefits. Typically, the services promoted under this system are those with positive externalities—services whose benefits extend beyond the individual receiving care.

Self-targeting involves an individual's self-selection for participation (or not) in a programme. It is a mechanism that encourages poor and non-poor patients to use separate services, such as a special room, a special time, or waiting in line. The principle underlying this strategy is that, given a choice, patients who can afford to pay will prefer to be treated separately and possibly in a more private and much more timely manner. (A caveat: It is important for equity to ensure that providing services separately does not result in creating two tiers of service quality: high-quality services for the non-poor and low-quality services for the poor (Newbrander et al. 2001).)

Most of these mechanisms are not mutually exclusive and can be used individually or in combination. They differ in ease of application, cost of determining eligibility, extent to which the poor and non-poor receive benefits, and sensitivity to regional differences. Direct and characteristic targeting are summarised in table 2.2.

Table 2.2 Overview of the Two Primary Targeting Mechanisms

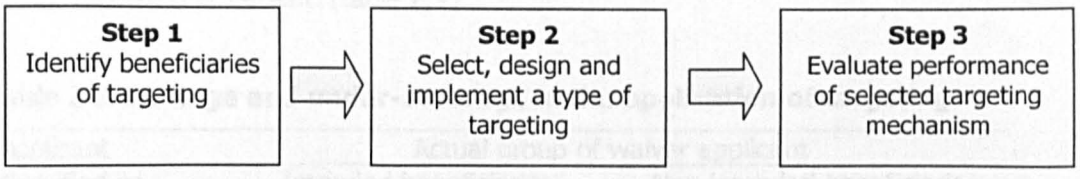
Feature	Direct Targeting	Characteristic Targeting
Population targeted	• The poor	• Individuals of specified target groups
Qualification for reduced or no fees	• Determined by income level	• Determined by individual's characteristics •
Examples of qualified individuals	• Members of poor families	• Armed forces • Civil servants • TB patients • Children under five • Pregnant women • AIDS patients
Means of determining qualification	• Means test • Evaluation by social worker • Proxy means test • Visual assessment (e.g., of clothing or housing) • Certification by village elder or chief	• Age (under five or elderly) • Geographical residence • Employment (military, civil service) • Nutritional status (at-risk child) • Diagnosis
Result of qualification (term used for receipt of a total or partial subsidy)	• Waiver	• Exemption
Advantages of the protection mechanism	• Targets the poor directly • Reaches the poor more effectively	• Requires less information • Requires less cost to administer • Has less stigma attached
Disadvantages of the protection mechanism	• Requires much information • Risks missing some poor (potential under-coverage) • Risks including some non-poor (potential leakage) • Stigmatizes those receiving the waiver • May be more bureaucratic and arbitrary	• May not exempt all of the poor from paying fees (under-coverage) • Exempts many who can afford to pay (leakage) • Accrues benefits to the non-poor

Source: Newbrander et al. (2000)

2.2.3 Process of implementing and performance of targeting mechanisms

Bitran and Giedion (2003) identified three steps to accomplishing equitable access to health care services by employing targeting mechanisms (either direct or characteristics targeting) under a user fee system as shown in figure 2.2. Firstly, it is important to identify who is eligible for protection. The population to receive preferential treatment with respect to user fees must be identified. Secondly, types of targeting must be selected, designed and implemented. Thirdly, an evaluation of the performance of the targeting mechanism is necessary with the purpose of ensuring that the protection policy is working effectively (Bitran and Giedion 2003).

Figure 2.2 Steps in the adoption of targeting mechanisms



Source: Bitran and Giedion (2003)

All three steps of the whole process involve three key actors; policy makers, health care providers and communities. Performance assessment of the targeting mechanism is mainly evaluated on five key indicators which are; coverage, leakage, administrative cost, access and financial burden (Bitran and Giedion 2003).

Coverage and leakage evaluation

Performance can be assessed by comparing actual exemption and waiver levels with targets and measuring coverage and leakage of the targeting mechanism.

- *Under-coverage*: Occurs when the intended beneficiaries do not receive benefits intended for them and either have to pay for care or do not use it at all.
- *Leakage*: Occurs when the non-intended beneficiaries receive benefits that were intended for the intended beneficiaries, resulting in the problem of charging people less than they can afford to pay.
- *Effectiveness*: The ability of waiver and exemption mechanisms to ensure that the benefit of not having to pay for health services reaches the intended beneficiaries and that those for whom the benefit was not intended do not receive that benefit. (table 2.3)

Table 2.3 Leakage and under-coverage in the application of targeting

Applicant classified as	Actual group of waiver applicant	
	Intended beneficiaries	Non-intended beneficiaries
Intended beneficiaries	Applicant correctly given benefits	*Leakage*: Non-intended beneficiaries given benefits
Non-intended beneficiaries	*Under coverage*: Intended beneficiaries are not given benefits	Applicant correctly denied benefits

Source: Newbrander et al. (2000)

Influencing factors

Bitran and Giedion (2003) described design and implementation features of protection mechanisms that affect their performance, as briefly summarized in table 2.4.

Table 2.4 Main features of design and implementation of targeting mechanism that affect performance

Design and implementation	Main features
General design and implementation features	1. Funding: Public resources available to finance exemptions 2. Health benefit covered: explicitly defined or not. 3. Existence and clarity of national policy 4. Exemption criteria: criteria for identification of beneficiary 5. Assigning responsibility for determination of those eligible: person or entities within or outside of health facility 6. Taking into account the multiple dimensions of vulnerability of the intended beneficiary: stigmatization problem 7. Updating fees and income eligibility thresholds: subject to changing context 8. Institutional aspects: clear guidance and appropriate support to implementer
Design and implementation features influencing *the supply of exemptions*	1. Provider compensation: sufficient subsidy covers all levels of exemption and administrative cost 2. Timeliness of compensation 3. Harmonizing the incentives created by different payment mechanisms: provider attitude and behavior on "the best paying patients"
Design and implementation features influencing *the demand for exemptions*	1. Disseminating information: knowledge for both health staff and potential beneficiaries 2. Access cost to exemption system: If the participation costs are high, it may deter demand to take up exemptions. 3. Social importance of stigma and discrimination of the exempted patient: Responsiveness of health care staff and eligibility examiner is important for encouraging the poor to take exemptions.

Source: Bitran and Giedion (2003)

If user fee systems are to reach an effective level in protecting equity while generating revenue, the following important issues need to be addressed (Bitran and Giedion 2003):

- The leaders must have commitment to the equity principle.
- For implementing the user fee system and exemption mechanism, clear guidelines are fundamental. Information about the user fee system, guidelines on the use of fee revenue and eligible criteria must be provided by the policy.
- At a facility level, administrative capacity is necessary for implementing a user fee system, collecting the fees, properly using the revenue to benefit the community and the poor, and exempting the poor.
- The accountability of the facility on use of fee revenue should be announced to the community.
- Effectiveness of the system can be measured according to the two types of protection mechanism (direct and characteristics targeting). Targeting is effective to the extent to which:
    - The eligible people who come for care are properly identified and granted waivers;
    - The non-eligible people who come for care are properly classified and not granted waivers;
    - The eligible people who do not come to the facility are reached;
    - Revenues are collected from those who should pay;
    - The eligible people, patients, and community are aware that waivers are available for the intended beneficiaries;
    - Staff know how to grant waivers and apply the guidelines consistently.

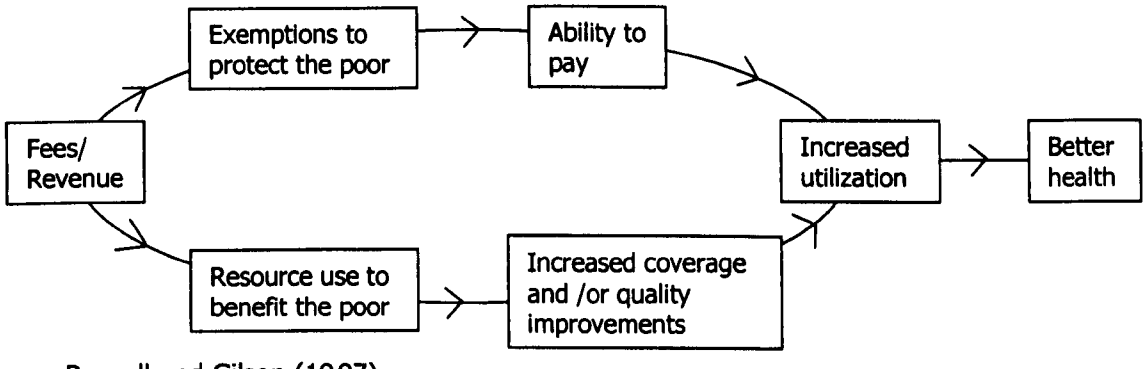
2.2.4 Mechanisms to protect the poor within user fee policy

The above sub-section provides information on both direct and characteristics targeting. This sub-section focuses only on direct targeting or exemptions to protect the poor under user fees. Russell and Gilson (1997) suggested two key strategies to promote access for the poor under a user fee system as can be seen in figure 2.3. Targeting to protect the poor and resource use to benefit the poor are facilitated by decentralization.

1. Perceptible service improvements. When user fees are introduced in the health care system, utilization might not decline if users recognize health services to be more effective and of greater value for money. Two other important preconditions for improvement of health services are decentralized financial control to keep and use user fee revenue at the point of collection and policy guidelines for health care facility management to use user fee revenue for health care service improvement and benefit for the poor.

2. Carefully designed fee schedules with exemptions. The choice of fees and targeting mechanisms depends on the situation in the individual country. National priorities, issues of social solidarity and the structure of the health care system must be of concern.

Figure 2.3 An idealized view of promoting access for the poor within a user fee system.



Source: Russell and Gilson (1997)

The success of introducing a user fee system in public health facilities with effective protection of the poor depends on many factors. Environmental factors and design factors are two main factors facilitating protecting the poor by means testing (Willis and Leighton 1995). A variety of factors result in differences in waiver practices across hospitals. Willis noted that hospitals were reluctant to charge fees, reducing fee revenue that might have been used to benefit the poor. Other factors included differences in equity objectives, eligibility criteria, availability of information of patient incomes and incentives faced by the facility.

Gilson (1988) emphasized that two main features required to protect the poor are an exemption mechanism and retention of sufficient revenue to extend and improve services in health care facilities. Introducing user fees within public health sectors requires management expertise. In order to promote improvement of management practices on user fees and exemptions, decentralization as a part of a financing policy package is recommended. Planning and budgeting autonomy as well as incentives to collect fee revenue should be authorized to local managers. Revenue retention might provide some incentives to better management of user fees. In addition, the successful implementation of user fee systems will be possible if there are adequate and appropriately trained staff and relevant management information systems. Gilson et al. (1998) suggested that one key element on the supply-side of success in relation to exemption mechanisms was careful planning for implementation, including training and information dissemination to health workers and those benefiting. Meng et al. (2002) recommended that hospitals required both adequate financial and political support for implementing effective protection from hospital charges for the poor.

However, Gilson (1988) indicated that the effective administration of these procedures was beyond many government health systems at that time. Gilson et al. (1998) found that eligibility for free care within the Free Medical Care Project in Thailand was based on the subjective judgment of the directors of health care providers but they did not have time or capacity to do a detailed assessment of the income of patients in order to apply the principle uniformly. Russell and Gilson (1995) indicated that apart from the greatest constraint to effective implementation of exemptions, lack of information about people's income, economic incentives was another major constraint. Providers felt reluctant to grant exemptions. This may arise because providers personally benefit

from the income from user fees (eg because fees are used to pay staff bonuses), or their facility benefits from improved working conditions made possible by user fee revenue. Newbrander et al. (2001) showed similar constraints to effective application of protecting the poor: for example staff were more concerned with generating revenues than granting waivers and exemptions and staff responsible for exemptions were untrained, might be too few, and faced time constraints. If the reason for an ineffective exemption scheme is "not enough time", "inadequate staff" and "untrained staff", it implies that the leader of the health facility and other staff gave this scheme a low priority compared to other tasks. This might have been because they lacked commitment and motivation to achieve the goals of the scheme. The only international publication on Lao PDR, on an urban area by Paphassarang et al. (2002), found that user fees at public providers were the main barrier for the poor and the exemption mechanism was not functioning. One reason was because of poor staff attitudes towards the poor and the less-poor patients. Bad staff attitudes were likely to have greater consequences for the poor, since they discouraged the poor from benefiting from exemptions.

However, no evidence clearly points out the incentives and disincentives for providers to provide exemptions to the poor. Moreover, in international health policy, there is no clear evidence as to whether exemption policy and practice influence the poor's coping strategies or not. Most studies have looked at numbers of exemptions, not household behaviour in terms of why households do/do not take them up. It is unclear what factors might encourage the poor to take up exemptions

2.3 Asian experience on user fees and protecting the poor

Literature from Southeast Asian countries, namely Cambodia, Vietnam and Thailand, are reviewed as they are the neighboring countries of Lao PDR. Their socio-cultural contexts are similar. The main concern of the review is to seek information relevant to the application of exemption arrangements and some other protection mechanisms.

Cambodia

A cost recovery scheme was introduced in the National Maternal and Child Health Center (NMCHC) of Cambodia, a public hospital in 1997. The study of NMCHC's experience with user fees during 1997-2000 suggested user fees can produce supplementary hospital revenue and can improve hospital services (Akashi et al. 2004). Utilization by patients also increased. User fees generated a sustainability cycle which contributed to an exemption programme for the worse-off patients, alleviating the government's financial burden and decreasing donor aid. Staff awareness was key to the effective implementation of this user fee scheme.

A case study of the introduction of user fees at operational district level, Kirivong District Hospital in Cambodia, revealed that user fees created a 'medical poverty trap' which had significant health and livelihood impact including untreated morbidity and long-term impoverishment (Jacobs and Price 2004). The exemption mechanism system was constrained by at least three main problems. First, there was a limitation of administrative capacity and it was expensive to operate. Second, the administration and monitoring of exemptions was fraught, as there was no clear guideline on the application of exemptions which resulted in misallocation of benefits. Finally, insufficient information and stigmatization prevented the poor from taking up exemptions. These three problems combined to make targeting expensive and ineffective.

One study pointed out that the amount of out-of-pocket payment for health care expenditure mostly depends on choice of health care provision. Health care expenditure was considerably higher for people using the public hospital in combination with the private hospital, and much higher for those using exclusively the private hospital (Van Damme et al. 2004). The study showed that even relatively

modest out-of-pocket health expenditure of a relatively short disease episode, such as dengue in a young child, frequently caused catastrophic health expenditure leading to debt in households and could lead to poverty.

An interesting functioning mechanism is the Health Equity Fund managed by a local NGO in Sotnikum, Cambodia. The Health Equity Fund identifies the poor and pays user fees on their behalf. It appears to effectively improve access to medical care for the poor by improving 'marketing' and information sharing. The Health Equity Fund in Sotnikum is able to operate effectively within three conditions (Hardeman et al. 2004). First, the fund is only a complement to a relatively well-functioning health service, in which health staff are adequate and qualified, drugs are available and there are no informal charges. Second, substantial socio-economic differentiation in rural Cambodia makes it possible to generate revenue from user fees from the majority of the population, while targeting support to those unable to pay. Third, a local NGO has considerable experience in the region and shows a positive attitude and ability to serve the poor. A recent publication by Noirhomme et al. (2007) reviewed the experience of implementing four different Health Equity Funds in Cambodia. It confirms that a Health Equity Fund is able to improve access to hospital services by the poorest people under the user fee system. Some lessons learnt are that subsidizing hospital care is an absolute need and targeting techniques can be used in combination. The four funds are financed by external sources and the paper argues that local sources of funding alone are not able to meet the health care costs of the eligible poor. Nonetheless, the paper does not provide any argument on the sustainability of the external sources.

Vietnam

User fees were introduced to public health facilities in Vietnam in 1995. Revenue from user fees constituted 30% of public hospital revenue by 1998 (Sepehri et al. 2005). Another study by Sepehri et al. (2003) showed that the system led to widespread self-treatment by both the poor and non-poor, people faced financial abuse by public and private providers and health care costs were substantial for many low- and middle-income households (Sepehri et al. 2003). There were formal exemption mechanisms for vulnerable groups such as war veterans, the disabled, orphans, ethnic minorities and the very poor. Quantitative studies in north Vietnam found that poor households delayed health service seeking (Segall et al 2002), and had lower use of public health facilities (Ensor and San 1996). The exemptions mechanism failed to protect the poor under user fees. About 60% of the rural households were in debt, with a third of them citing payment for health services as the main reason. Ensor and San (1996) called for a completely new protection mechanism for the poor.

Vietnam's Health Care Fund for the Poor (HCFP) started in 2003. The government mandated all provincial governments to provide free health care to the poor, ethnic minorities in mountainous provinces designated as difficult, and all households living in disadvantaged communes. The HCFP received two sources of finance; 75% from the central government and the rest from the provincial government. Analyzing the Vietnam Household and Living Standard Survey in 2004, Wagstaff (2007a) found that the HCFP covered the poor well but was not able to cover all intended groups. The programme functions fairly well in terms of increasing the utilization of services and reducing the risk of catastrophic health expenditure. However, the utilization impacts are rarely significant among the poorest decile and the poor households were still at considerable risk of catastrophic spending.

Thailand

Before the Universal Coverage Scheme in 2001, Thailand had had long standing user fee schemes among public health providers. It had raised a significant amount of revenue for hospitals providing, on average 40% of total hospital revenue. Of this user fee revenue, around one-third was collected from drug selling on a fee-for-service basis. The government developed the Low Income Card Scheme (LICS) for the poor as well as other vulnerable groups such as monks, students, and elderly people. The identification of the poor was conducted at community level. People who qualified were given a beneficiary card. Special funds were set aside to compensate public providers for waived services. The LICS experienced difficulties with targeting: using formal income criteria, leakage, under coverage, stigmatization of the poor and, the most important issue, inadequate funding (Gilson et al. 1998). A problem of inequity in budget allocation for LICS was shown with budget allocations favouring the better-off regions, and not focused in those regions which had higher numbers of poor people eligible for LICS (Mills 1991). Another study showed that the poor were more likely to pay for health care expenditure out of their own pocket than the better-off group, and they paid more as a proportion of their household income compared to more privileged groups (Pannarunothai and Mills 1997). The underprivileged group was least likely to be covered by a government health benefit scheme and about two-thirds of family members in the poorest quintile were not covered by the LICS.

The Thai government fully implemented the Universal Coverage Scheme throughout the country in October 2001. The scheme was funded by the government budget. Limwattananon et al. (2007) reported that the overall incidence of catastrophic expenditure reduced to 3.3% and 2.8% in 2002 and 2004. Despite health financial risk protection for the entire population, household catastrophic health expenditure and impoverishment could still be found, mainly due to use of services in private hospitals which were not covered by the scheme.

2.4 Protection mechanism for the poor: community-based health insurance

The two sections above provide information on mechanisms to protect vulnerable groups (including the poor) using targeting under user fees. Examples from three neighbouring countries of Lao PDR suggest that exemptions, generally, did not function well to protect the poor and other types of protection mechanism are required. This section looks at literature which describes protecting the poor from user fees using community-financing. The form of health insurance, community based health insurance (CBHI), is reviewed because it exists as a pilot project in Lao PDR. Other forms of insurance, for example social health insurance for workers in public or private sectors, are unlikely to expand to protect the poor. The literature is reviewed below, therefore, in terms of whether or not CBHI potentially promotes protection for the poor.

Common features of CBHI

Definitions of community health financing are provided by many experts in the health financing area. Jakab and Krishnan (2004) characterized those broad definitions into five categories.

> "First, the community (geographic, religious, professional, ethnic) is actively engaged in mobilizing, pooling, and allocating resources for health care. Second, the beneficiaries of the scheme have predominantly low income, earning a subsistence from the informal sector (rural and urban), or are socially excluded. Third, the schemes are based on voluntary engagement of the community (although not necessarily of the individual community members). Fourth, the structure of resource mobilization and benefits reflect principles of solidarity. And fifth, the primary purpose of the schemes is not commercial (that is, not-for-profit)."

There are various types of community financing, with the concern here being CBHI. The basic model of the CBHI scheme suggested by Bennett (2004) showed that scheme members pay premiums to the CBHI fund. The scheme pays health care providers for services and the providers provide health care services to the members. The basic model of CBHI could be extended. The non-members of the scheme could

access and use services from the providers but they might have to pay user fees. The scheme could directly get support from the government or external donors. At country level, it could be a multiple risk-pooling scheme by combining the CBHI with other existing health insurance schemes e.g. social health insurance schemes and government financing of services. Bennett (2004) recommended that the CBHI scheme needed to move away from its specific objective and tie into the broader goals of the government or the health system.

Performance of CBHI contributes to health financing

Carrin (2005) suggested that the performance of CBHI contributes to the health system when it can respond to the three sub-functions of health financing; revenue collection, fund pooling and purchasing. Table 2.5 presents the three financing sub-functions, determinants affecting the performance of CBHI, and some results of CBHI performance from literature reviews.

Revenue collection: CBHI schemes can have multiple sources of finance, including prepayment by members, user fees at point of services, government subsidy and donor assistance. Prepayment contribution schemes might automatically prevent the poorest from joining the schemes. Therefore, membership is the most significant feature of the scheme which would affect risk pooling. A variety of factors was suggested for improving the incentive of people to join the schemes. For example, the timing of collecting the contributions should match the income pattern of members. Members' trust in the integrity and competence of the managers would facilitate establishment of CBHI. Premiums should be affordable for members. A study by Dong et al. (2005) suggested that premiums could be adjusted in relation to income and exemptions and subsidies for the poor to enroll in CBHI were important if the objective is to improve equity of health.

Pooling risk: Due to the nature of voluntary membership, CBHI schemes normally face a problem of adverse selection which leads to small size of the scheme and then insufficient risk pooling. The small scale of CBHI puts pressure on the financial viability of the CBHI and could even result in bankruptcy. The managerial capacity of the scheme could be undermined if there was insufficient money to hire a professional manager. Carrin (2005) suggested many alternative strategies for greater risk pooling,

for example to have reinsurance (to buy insurance with a re-insurer in order to protect against unexpected high-level health expenditure) and to set larger risk pools via management of many small scale schemes, or the establishment of a federation or network.

Purchasing: WHO (2000) defined the purchasing and resource allocation function of CBHI schemes as 'health services package to purchase, providers to purchase from and payment methods and contracting arrangements'. An attractive benefit package might be a factor affecting people's decision to join the scheme. However, it was found that benefit packages were weakly defined (Carrin 2005). Lack of management and administrative skill of schemes was mentioned (Jakab and Krishnan 2004). Salary and budget was the most frequent payment used in CBHI, followed by fee-for-services and capitation payment. Many CBHI schemes established a waiting period before a member can use services from CBHI. It was one way to prevent adverse selection of the scheme.

Table 2.5 Performance of CBHI on financing sub-functions

Health financing sub-functions *	Factors influencing performance of CBHI *	Performance **
Revenue collection	Enrolment - Affordability of contributions - Unit of membership - Distance - Timing of collection - Quality of care - Trust Prepayment ratio - Mix of contributions by household, central and local government, donors	• Low percentages of enrolment compared to the target population (Carrin 2005) • Small size of the schemes e.g. fewer than 500 members (Palmer et al. 2004, Jakab and Krishnan 2004) • A combination of revenue sources; prepayment, user fees, central and local government subsidy and donors (Jakab and Krishnan 2004, Carrin 2005, Bennett 2004)
Pooling of resource	Trust Mechanisms for enhanced risk pooling	• Small risk pools and potential problem of adverse selection (Jakab and Krishnan 2004, Carrin 2005)
Purchasing of services and resource allocation	Contracting Provider payment mechanism Referrals Waiting period	• Lack of the management and administrative skills necessary for the successful design and operation of the schemes (Jakab and Krishnan 2004) • Benefit packages weakly defined (Carrin 2005). • The most prevalent payment methods were salaries and budgets, fee-for-service, and capitation payment (Carrin 2005).

Note * Suggested by Carrin (2005).
** from the literature.

Impacts on health financial protection

CBHI could increase access to health for members covered by the schemes and reduce the financial burden of those seeking health care (Palmer et al 2004, Jakab and Krishnan 2004, Ekman 2004). However, the effects of CBHI were small and the schemes served a limited number of people. The poorest were usually excluded from coverage. The voluntary contributory nature of CBHI was unconvincing as a viable option for sustainable financing for essential health services in low-income countries as it mobilized insufficient amounts of resources (Jakab and Krishnan 2004, Ekman 2004). In order to protect the poor, the schemes could combine a variety of sources of finance. Government subsidy and donor assistance could be sources to support protection of the poor by these schemes as mentioned earlier.

2.5 Concluding remarks

This chapter has reviewed literature relating to user fees and protecting the poor. The review reveals that user fees, official payments made by patients at the point of service, were introduced or increased in order to fill a revenue gap for under-funded services. However, in practice, user fees have not fulfilled the expectations set for them when they were established. Exemptions systems rarely work, especially for the poor, as they are generally inadequately funded and health workers have an incentive not to promote them. The demand side might not recognize the exemptions due to lack of knowledge or stigmatization or could not afford transportation cost to get free care.

Acknowledging all the literature reviewed above, some knowledge gaps in relation to protecting the poor or the exemptions to the poor can be identified as follows:

- There has been little exploration of provider motivations to grant exemptions.
- There is no clear evidence of households' perspectives on taking up or not taking up exemptions.
- Most health care financing research in developing countries has focused on the limited scope of one particular topic. Little research has been conducted with a comprehensive view from demand and supply-sides as well as policy makers' perspectives to provide policy implications and recommendations for protecting the poor.
- Research on user fees and exemptions in Lao PDR is very limited.

Therefore, studying the implementation of exemption policy from the experiences of three main stakeholders; households, public health care providers and policy makers, in Lao PDR, a least developed country, will contribute to filling these knowledge gaps.

CHAPTER 3
RESEARCH OBJECTIVES AND METHODOLOGY

This chapter describes and justifies the methods employed in the study. It consists of seven sections in total. The first section presents the aims and objectives of the study. Section two illustrates the conceptual framework of this study, while the third section briefly describes the study setting. Section four provides details of methodology, as used in each of four sub-studies. Data processing and data analysis are described in the fifth section and quality control of the study is described in section six. Finally, the limitations of the study are presented in the last section.

3.1 Aim and objectives

Overall aim

In the context of the current situation of health care financing in Lao PDR, the study aimed to contribute to health financing policy on how to improve protection of the poor from health expenditure.

Objectives

1. To assess the socio-economic circumstances of villages and distinguish poverty differences between households.
2. To assess health service utilization patterns and household illness costs.
3. To assess illness cost burden to households including identifying catastrophic health expenditure and assess the strategies households use to cope with costs of illness with an emphasis on taking up the exemption mechanism.
4. To assess public health care providers' behaviour and attitudes on exemption mechanisms.
5. To assess the perceptions and preferences of national policy makers on fee exemption policy and implementation.
6. To analyse the financial implications of alternative protection mechanisms, and identify implications for pro-poor financing and provide recommendations on improved ways of protecting the poor.

3.2 Development of the methodology

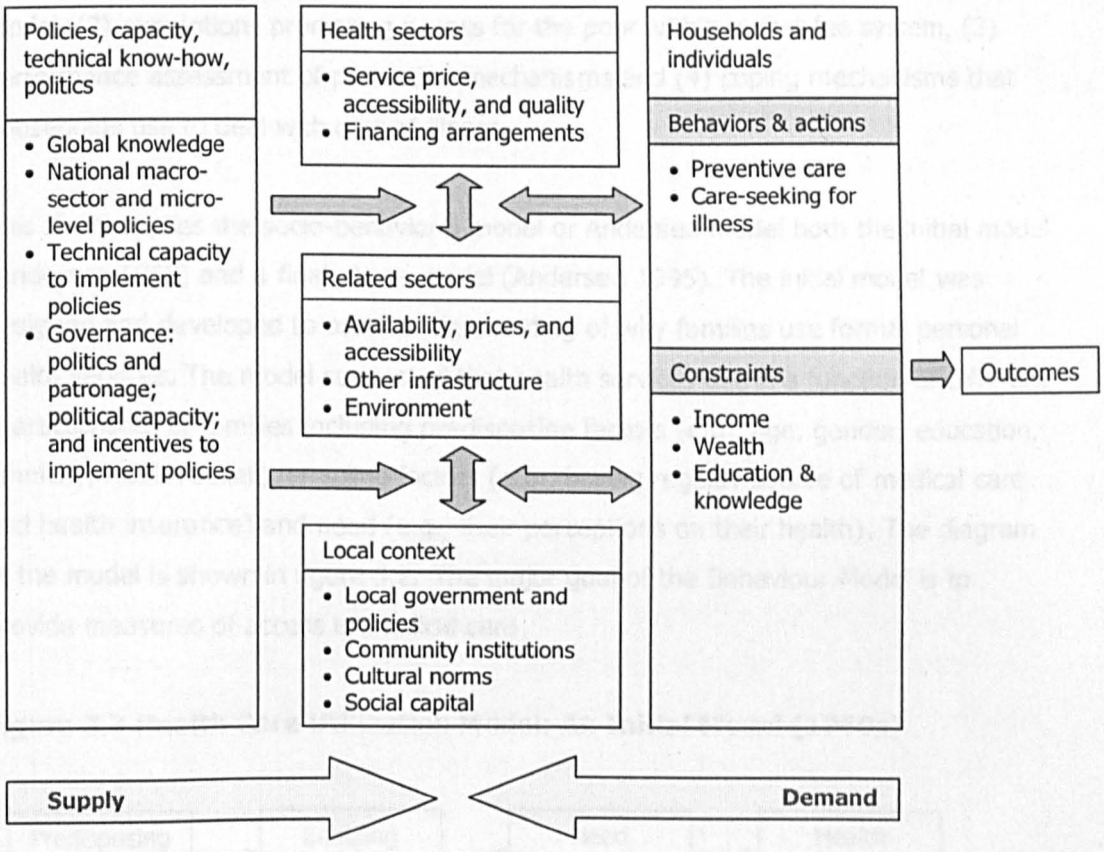
3.2.1 Theoretical framework

In order to have a genuine understanding of health care financing dominated by a user fee system, this study required a comprehensive analysis. The study needed to seek a variety of opinions from all key persons involved in a protection mechanism in order to understand all possible different perspectives and expectations. Three main concepts which are (1) the determinants of supply and demand for health services, (2) health care utilization models and (3) coping strategies to deal with costs of illness are applied in this study.

The determinants of supply and demand for health services

In a health system, many determinants influence outcome from both demand and supply sides at many levels. The demand for health care is decided by individuals and households. These individuals and households compare benefit and costs and their capacity to pay across barriers of access to their preferred choices. The characteristics of health care systems encompass health policy objectives through to health worker behavior. Government has responsibility to make the system work for people. The policy makers are key persons in deciding the adoption of health policy. This study applies a framework of various determinants of supply and demand for health services from the World Development Report 2004 (World Bank 2003). Figure 3.1 shows the overall conceptual framework in terms of supply and demand side points of view, the first part of a comprehensive analysis.

Figure 3.1 The determinants of supply and demand for health services operate through many channels



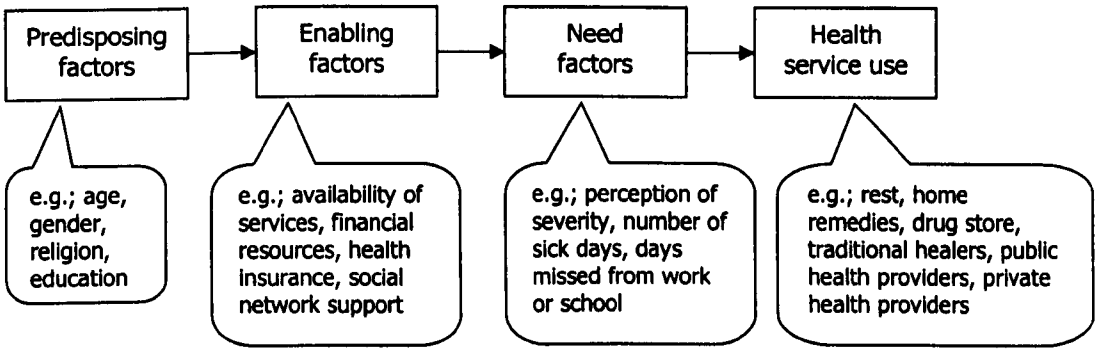
Source: World Development Report 2004 (Crate 1.1)

Health care utilization models

In order to complete a comprehensive picture, the framework from the World Bank above is combined with four other concepts which are (1) a health care utilization model, (2) exemptions promoting access for the poor within a user fee system, (3) performance assessment of protection mechanisms and (4) coping mechanisms that households use to deal with cost of illness.

This study applies the socio-behavioral model or Andersen model both the initial model (Andersen 1968) and a final phase model (Andersen 1995). The initial model was designed and developed to assist understanding of why families use formal personal health services. The model suggested that health services use is a function of different characteristics of families including predisposing factors (e.g., age, gender, education, ethnicity, health belief), enabling factors (e.g., having regular source of medical care and health insurance) and need (e.g., their perceptions on their health). The diagram of the model is shown in figure 3.2. The major goal of the Behaviour Model is to provide measures of access to medical care.

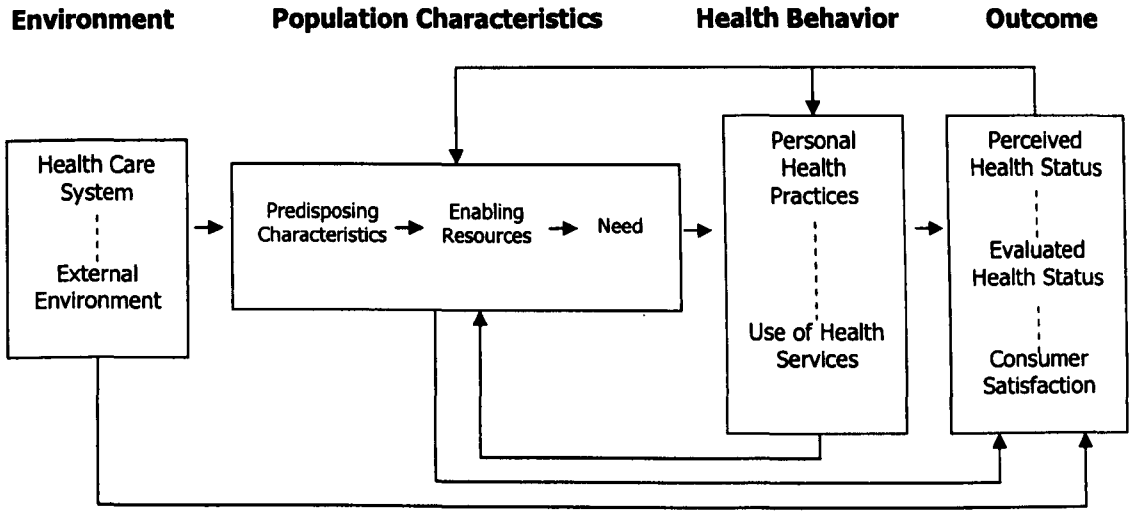
Figure 3.2 Health Care Utilization Model: An Initial Model (1960s)



Source: adapted from Andersen (1968)

The Behavior Model has been reviewed and updated over time. The final, Phase 4, model portrays the multiple influences on health services use and comprises feedback loops recognizing the dynamic nature of the model as shown in figure 3.3. The dynamic model is applied in the conceptual framework of this study.

Figure 3.3 The Health Care Utilization Model: An Emerging Model — Phase 4



Source: Andersen (1995)

Coping strategies to deal with costs of illness

Sauerborn et al. (1996) identified seven types of strategies for households to cope with financial costs of illness. These coping strategies are using cash and mobilizing savings, sale of assets, loans, income diversification, wage-labour, free care and gifts. Initially, most households spend any available cash or saving on health care costs. Selling assets is also a common method to pay medical bills such as the sale of animals, cereals, or equipment. However, selling assets under pressure often results in a low price. Taking loans is one option however; it is usually obtainable for wealthy households who are in a position to pay back. People can earn additional income from leisure time, for example building fences, weaving straw mats/hats and tailoring. Working as a wage-labourer is a last resort for people who lack assets, lack access to credit and lack community support. Accessing free care can be in many ways such as by waiver letter, exemption card, vouchers, and exemption at point of service. Patients may take or not take up free care. Gifts may be from kin, community and/or health staff. Households may apply only one coping strategy or combine many strategies to deal with the cost of medical bills.

Russell (1996) showed that when households face health care expenditure beyond their routine budget, households can modify health care consumption, for example delay consumption, reduce attendance rate or length of stay, cut level of treatment,

not complete treatment regime, shift demand to other providers, only treat priority individuals and not seek treatment. Russell (2005) also emphasizes the importance of access to social resources in helping households cope. The concept of coping strategies is used in this research as a guideline for asking patients what they did when they were faced with medical bills and why they took or did not take up exemptions for the poor.

The concept of exemptions promoting access for the poor under a user fee system from Russell and Gilson (1997) is matched with a health care financing system dominated by user fees. Performance assessment of the protection mechanism in terms of funding, policy design, supply-side implementation, demand-side features and effectiveness of the programs, coverage and leakage, and factors influencing its success are drawn from Bitran and Giedion (2003) and Newbrander et al. (2000).

In conclusion, the theoretical concepts mentioned above are combined together and applied into one conceptual framework to facilitate comprehensive analysis in this study. The concepts determinants on supply and demand side for health services are used for evaluating all perspectives from policy maker, supplier and households who are major stakeholders in the health care financing system. Concepts of health care seeking behavior, exemptions under the user fee system, assessment of performance of the protection mechanism and coping strategies are used in this study in terms of evaluation of policy design, implementation, effectiveness of the protection mechanism, factors that affect its success and the reaction of the household to the protection mechanism.

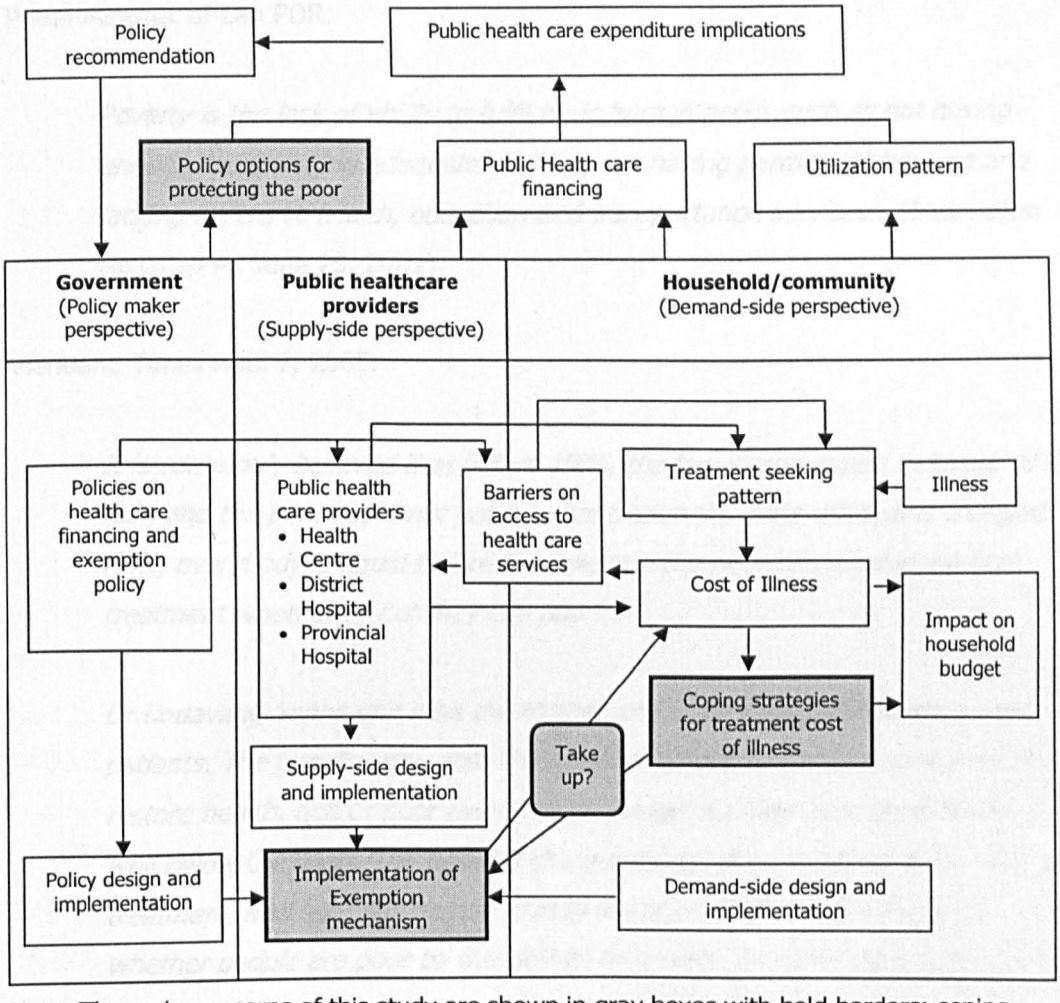
3.2.2 Conceptual framework of this study

The conceptual framework is shown in figure 3.4. Three main components directly involved in the health care financing system are taken into account in this study. Firstly, governments at both national and local level are policy decision makers whose decisions lead the direction of the health care system. Secondly there are sub-health systems which mainly focus on public health care providers at all levels namely health centres (called Suk Sala), district hospitals (called Rong Moh Muang) and provincial hospitals (called Rong Moh Khaeng). They translate health policy into practice in the actual context of the community in order to provide health care services to people. Thirdly, household members that live together in the community will obtain health care services from available health care providers under the prevailing conditions of health care financing especially user fees and the exemption mechanism set by policy makers and practised by health care providers. This results in different treatment seeking patterns for each individual.

For the policy maker perspective, national policies as well as local policies on health care financing and exemption policy including design of the exemption system will be explored. For supply-side perspective, health care financing information at all levels of public health care facilities, exemptions in practice and attitudes on exemptions will be investigated. For demand-side perspective, illness, treatment seeking pattern, cost of illness and impact of treatment costs on household budgets will be thoroughly examined. Coping strategies for households to deal with cost of illness and exemptions will be scrutinized from household experiences. And then all results above would reflect the success of existing exemption mechanisms.

The aim is thorough investigation and development of genuine understanding of pro-poor financing by combining information of utilization patterns of people, health care financing system in health facilities, and financing models on effective protection of the poor. The research will come up with recommendations for the effective protection of the poor.

Figure 3.4 Conceptual framework of health care services, financing and exemptions from perspectives of policy maker, and supply and demand sides



Note: The main concerns of this study are shown in gray boxes with bold borders: coping strategies for cost of illness, implementation of exemption mechanism, taking up the exemption mechanism and financing models for protecting the poor.

3.3 Study setting

Prime Minister of Lao PDR:

> *Poverty is the lack of ability to fulfil basic human needs such as not having enough food, lacking adequate clothing, not having permanent housing and lacking access to health, education and transportation services..* (Instruction No 010/PM, June 25, 2001).

Vientiane Times April 7, 2005:

> *It is commonly believed that before 1975, the law discriminated in favour of the rich, and the poor could not get hospital treatment. After 1975, this changed. Now, everybody is equal before the law, and the poor can receive medical treatment whether or not they can pay.*
>
> *Dr.Bouavang Senhsathit says the Mother and Child Hospital welcomes poor patients. The hospital says that the first duty of a hospital is to save lives and restore health, rich or poor even though budget subsidy from government is well below the need. The hospital charges those who can afford it for medical treatment, and uses the money to help the poor. It does not only judge whether people are poor by the clothes they wear, as some rich people try to get free treatment by wearing old clothes. But staff point out that usually, people do not come to the hospital when they have no money unless they have a serious health problem.*
>
> *Mrs Lee Her, Ban Nakhoung, Xaythany district, lives 30 km from the hospital. She was admitted in the hospital and got success in operation. She did not immediately go to the hospital because she had no money and thought that only the rich could be treated there.*

Country background

Lao PDR is located in the heart of the Indochinese peninsula, in Southeast Asia. Lao PDR is a land-locked country and it is classified as one of the Least Developed Countries (LDCs) (United Nations 2004). The north borders China, the south borders Cambodia, the east borders Vietnam, the west borders Thailand and the northwest borders Myanmar. Three-quarters of the total area in Lao PDR consists of mountains and plateaus. The country has three distinct regions; central, north and south. The north is dominated by mountains. The other two regions comprise large and small plains along the Mekong River.

Data from the Population Count 2003 showed that the total population on the 1 July 2003 in the Lao PDR was 5.34 million (National Statistical Centre 2004). The average population density is 21 per square kilometer, giving Laos the lowest population density in Asia. The three largest population sizes are in Savannakhet province with 15% of the total population (782,617 people), Vientiane Capital with 12% of total population (524,872 people) and Champasak Province with 11% of the total population (578,669 people). Data indicate that most of the population lives in rural areas, about 74% of the total population. The Lao PDR has a highly diverse population, with more than 68 ethnic minority groups who mostly live in geographically isolated mountain areas. The Human Development Report 2006 shows GDP per capita in 2004 to be 419 US$ with life expectancy at birth to be 55.1 years and adult literacy rate 68.7% (United Nations Development Programme 2006). Data from Lao Expenditure and Consumption Survey 2002/2003 indicates that the proportion of people living in poverty is 32.7 % of the total population (Lao PDR 2003).

Health sector in Lao PDR

The health care delivery system in Lao PDR is composed of a public and private sector. The public sector comprises 3 central, 5 regional, 6 specialized, 13 provincial and about 122 district hospitals, as well as 533 rural health centers[2]. The private sector includes 1,990[3] licensed pharmacies and 261[4] private clinics, as well as unlicensed providers (Paphassarang et al. 2002). Information from the Lao National Health Survey in 2000 indicates that the nearest health centre, hospital or pharmacy is quite far with regional variations of 4 to 96 kilometers. It is estimated that only 26% of the population live within a three-kilometre radius of a health facility, and more than two-thirds of the population have limited or no access to health services (National Statistical Centre 2001). The Population Count 2003 shows that only 7.1 % of total villages have health centres. A comparison between urban and rural areas shows that there were 6.9 % of villages in rural areas and 8.9 % of urban areas with health centers.

Health care financing in Lao PDR

The World Health Report 2006 (WHO2006) states that, in 2003, the total health expenditure (THE) of Lao PDR was 3.2% of GDP, equivalent to 11 USD per capita – the smallest share of GDP and the lowest THE in USD per capita compared to its neighbours, Cambodia (THE 10.9% of GDP and 33 USD per capita), China (5.6% and 61), Thailand (3.3% and 76) and Vietnam (5.4% and 26). Of the THE, about 38.4% was paid from government sources, 30% from external sources and 46.4% from household out-of-pocket payment (OOP). A greater proportion of THE came from OOP than from government funds. This profile is similar to Cambodia, China and Vietnam but contrasts with Thailand. About one-third of OOP in Lao PDR was spent on user fees for public health providers and the remainder on private services (WHO 2003). This pattern is similar to Thailand and Vietnam where 34.9% and 37.2% of total OOP respectively was spent on the public sector (Van Doorslaer et al. 2005).

In Lao PDR, like other developing socialist countries such as China (Carrin et al. 1999) and Vietnam (Segall et al. 2002), a major reform in health financing occurred during the 1980s, as a consequence of a shift from a socialist planned economy to a market-

[2] Data in 2000
[3] Data in 1999
[4] Data in 2000

based economy, as well as decentralization and privatization. In addition, user fees were introduced in the public health sector in many developing countries in 1987 (World Bank 1987). The Lao health system has officially endorsed a national policy on user fees and exemptions for the poor since 1995 (MOH 1995a) with the particular aim of generating more financial resources to operate revolving drug funds (Murakami et al. 2001).

There are no national health insurance schemes in Lao PDR. It is estimated that 16% of the total population are covered by the Government Employee Scheme, less than 1% of total population (about 40,000 beneficiaries) are under Social Health Insurance. These two schemes are compulsory contributory schemes. As of July 2006, about 18,829 people in 5 small scale pilot districts voluntarily contributed to Community Based Health Insurance (CBHI). The major limitation of CBHI is its capacity in coverage extension. Major challenges of CBHI were identified, for example, financial sustainability, voluntary nature and adverse selection, potential moral hazard and high use rate by members (Ron 2006). The monthly membership put the Scheme at risk of a sudden fund disruption if all members withdraw from the scheme.

Currently, the majority of population, about 85% of the total of 5.3 million population, has no health insurance and is directly faced with user fees at point of service. An expensive medical bill might not have a negative effect on a household, especially a poor household, if it is exempted from paying user fees. However, as in other countries, exemption policy in Lao is thought to be not well functioning (Paphasarrang et al. 2002). Some poor urban households could not pay medical fees and did not seek care or delayed care-seeking or sought alternative provision, while others were able to manage using a variety of coping strategies e.g. using savings, selling assets, receiving assistance from relatives and neighbours, borrowing money and requesting credit from private providers (Paphasarrang et al. 2002).

The government aims to eradicate poverty by 2015. The National Growth and Poverty Eradication Strategy (NGPES) was launched in June 2004 by the government (Lao 2004). The objectives of poverty eradication in the NGPES are in line with the country's commitment to achieve the Millennium Development Goals (MDG) by 2015. According to the NGPES, a total of 142 districts in Lao PDR were classified into two main groups;

72 poor districts and 70 non-poor districts. Among 72 poor districts, 47 of them were identified as the priority for poverty eradication and other improvements in 2003 – 2005 (figure 3.5). The NGPES has highlighted health problems as one objective to solve in order to achieve the poverty eradication objective by 2015.

Within the policy context, a financial protection mechanism for improving access by the poor to health services is most relevant. In the current situation in Lao PDR, improving the health of the poor using health care financing reform is difficult due to several limitations, including inadequate finance (Ministry of Health 2002). Protection from poverty due to the cost of illness in the Lao context is feasible, but far from automatic. There is a need to scrutinize and carry out an in-dept investigation to understand health care financing in Lao PDR from not only policy and provider perspective but also from a household perspective.

Study setting

Savannakhet (SVK) Province in Central Lao PDR was selected for the fieldwork. It consists of 14 districts with 4 poorest districts as the government priority, 3 poor districts but not the priority and 8 non-poor districts (map in figure 3.5). Feasibility to travel within this province, the possibility to conduct fieldwork without a dialect problem, and safety for the researcher were the main incentives for choosing the site of the fieldwork in SVK Province.

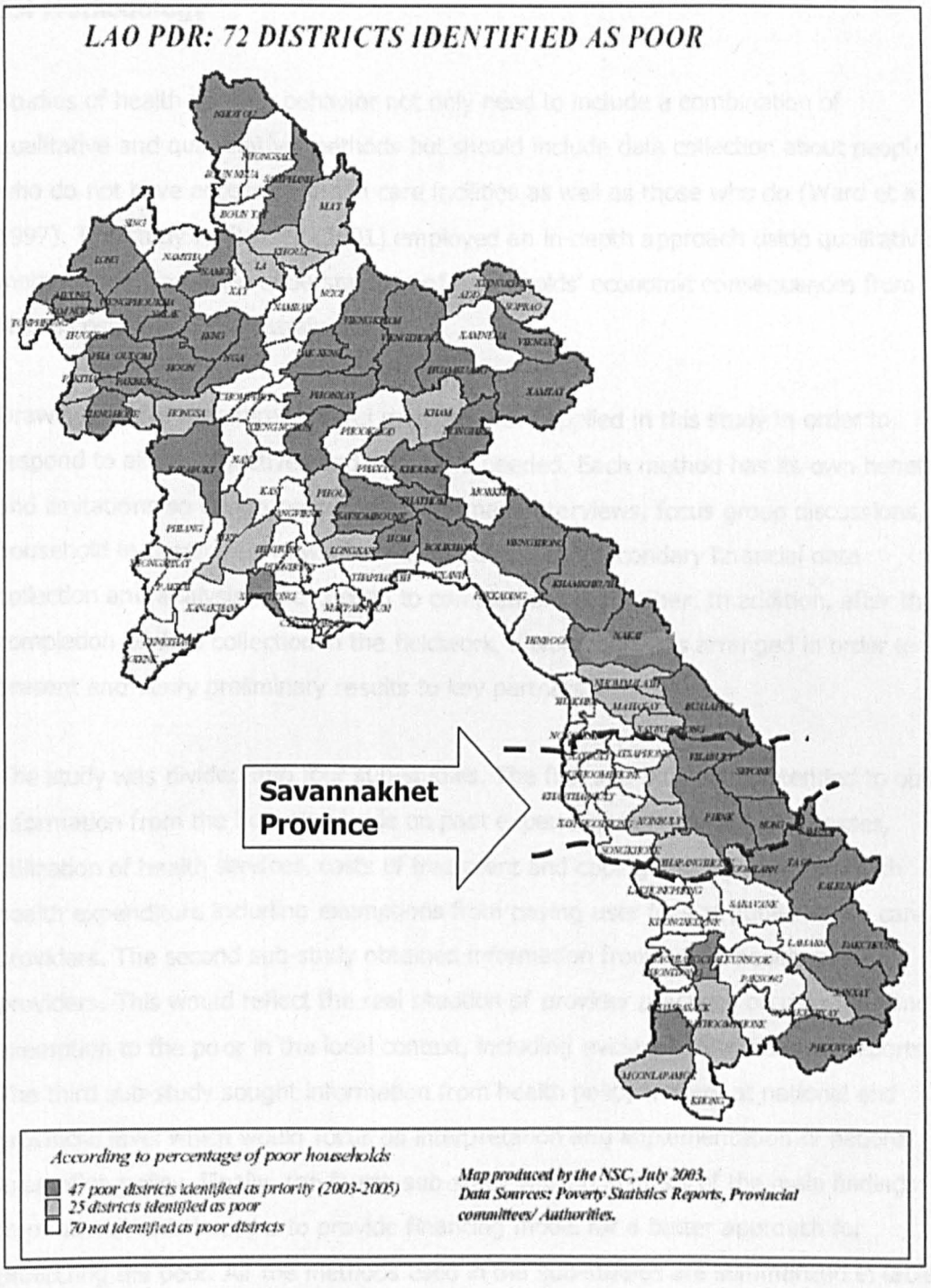


Figure 3.5 LAO PDR: 72 Districts Identified as Poor

3.4 Methodology

Studies of health seeking behavior not only need to include a combination of qualitative and quantitative methods but should include data collection about people who do not have access to health care facilities as well as those who do (Ward et al. 1997). The study by Russell (2001) employed an in-depth approach using qualitative methods to gain better understanding of households' economic consequences from illness costs and coping strategies.

Drawing on this literature, several methods were applied in this study in order to respond to all the objectives and indicators needed. Each method has its own benefits and limitations so village census, key informant interviews, focus group discussions, household in-depth interviews, document review and secondary financial data collection and analysis were chosen to complement each other. In addition, after the completion of data collection in the fieldwork, a workshop was arranged in order to present and verify preliminary results to key partners.

The study was divided into four sub-studies. The first sub-study was intended to obtain information from the household side on past experiences of villagers of illnesses, utilization of health services, costs of treatment and coping strategies to deal with health expenditure including exemptions from paying user fees at public health care providers. The second sub-study obtained information from public health care providers. This would reflect the real situation of provider practices on user fees and exemption to the poor in the local context, including evidence from financial reports. The third sub-study sought information from health policy makers at national and provincial level which would focus on interpretation and implementation of national exemption policy. Finally, the fourth sub-study was an analysis of the main findings from all methods in order to provide financing model for a better approach for protecting the poor. All the methods used in the sub-studies are summarized in table 3.1.

Table 3.1 Sub-studies: objectives, methods, samples and result chapters

Sub-study	Objective	Methods used	Sample	Chapter
The first sub-study	1. Economics status of sampled households 2. Household utilization patterns and costs of illness 3. Cost burden, including catastrophic expenditure and coping strategies of household to deal with costs of illness	• Village census • Household consumption survey • Key informant interviews • Focus group discussions • Household in-depth interviews	• 172 households in 4 Villages (2 in poor district and 2 in non-poor district)	4, 5 and 6
The second sub-study	4. Providers' practice on user fees and exemptions	• Key informant interview • Collecting financial reports	• 2 central hospitals • 2 provincial health offices • 1 provincial hospital • 7 district hospitals • 14 health centres	7
The third sub-study	5. Policy makers' perceptions on exemption policy	• Key informant interviews • Document reviews	• 22 key informants	7
The fourth sub-study	6. Recommendation on financing model and its financial implications for better ways to protect the poor	• Document reviews • Analysis of main findings from previous sub–studies and discussion at workshop on the current context		8

3.4.1 The first sub-study: household side

The study of household perspectives did not aim to represent a district or a province. It aimed to gain insight into the nature of the village. The desire to obtain in-depth understanding of households' perspective limited the scope of the study. Therefore, four villages of two districts were selected - districts were selected first and after that villages in the district were selected.

Sampled districts

When getting ethical approval from the Ministry of Health, Lao PDR in October 2005, possible districts and villages for the first sub-study had been explored and selected between October and November 2005 using three approaches; seeking advice from senior staff of SVK Provincial Health Office; analysis of the most update financial data (fiscal year 2004) and rapid surveys of the real situation in several district hospitals. Subsequently, exclusion and inclusion criteria were set as follows;

- Exclusion criteria
  - The district in the catchment area of SVK Provincial Hospital was excluded.
  - Due to transportation, safety and dialect problems, two districts on the border with Vietnam, namely Nong and Xepone were excluded.
  - Vilabouli hospital reported using 25% of user fee revenue for exemptions in 2004. As this figure was dramatically different from all the other hospitals, it was considered to be unreliable and therefore excluded (table 3.2).
- Inclusion criteria
  - Poor and non-poor districts: A total of 14 districts in SVK were divided into seven poor districts and seven non-poor districts according to the NGPES in 2003. Due to time and budget constraints a limited number of districts could be sampled and needed to cover both poor and non-poor districts so one poor and one non-poor district was sampled.
  - High utilisation rate at district hospital: In order to have enough cases for the household in-depth interviews, districts with the highest utilization rate of out-patient visits and admission were the first priority.

Following these exclusion and inclusion criteria, Phine and Atsaphangthong (APT) were chosen from poor and non-poor districts, respectively. The next step was to choose villages.

Table 3.2 Information on 14 district hospitals in SVK province, FY 2004, for choosing study sites

	District hospital of	% exemption out of expense from user fee revenue	OP use rate* (visit per person per year)	Admission rate** (admission per person per year)
Non-poor district	Atsaphangthong (APT)	1%	0.237	0.037
	Songkhon	1%	0.135	0.023
	Outhoumphon	0%	0.108	0.008
	Xaibouli	0%	0.071	0.008
	Champhon	1%	0.060	0.018
	Atsaphon	1%	0.053	0.012
	Xaiphouthong	0%	0.036	0.003
	Average Non-poor districts	1%	0.095	0.016
Poor district	Phine	5%	0.258	0.026
	Xepon (excluded)	0%	0.179	0.031
	Phalanxai	2%	0.153	0.029
	Thapangthong	0%	0.146	0.016
	Xonbouli	0%	0.062	0.010
	Vilabouli (excluded)	25%	0.061	0.014
	Nong (excluded)	3%	0.058	0.009
	Average Poor districts	3%	0.141	0.020

Note * OP use rate = total OP visits / number of population
** Admission rate = total discharges / number of population

Sampled villages

In order to understand the utilization patterns of households in the different settings, two villages per district were chosen based on location – one which had difficulty in accessing the district hospital and another which did not. The difficulty of access was relative between villages and village within the district. The researcher consulted with the director and senior staff of the District Health Office (DHO) to carry out a rapid survey of several villages. Finally, four villages were chosen from two districts (table 3.3), abbreviated as TAL for Tang A Lai, KY for Ka Yong, SPX for Sisaphanxai and KK for Kok Kong village.

Table 3.3 Four sampled villages in two districts for the first sub-study: household side

		Status of the district	
		Phine (Poor district)	APT (Non-poor district)
Location:	Difficult*	(1) TAL 62 households	(3) SPX 36 households
	Not much difficulty*	(2) KY 34 households	(4) KK 40 households

Note: *difficulty in accessing district hospital (relative within the district)

Conducting the first sub-study

The fieldwork was conducted in the Lao language by the researcher with the assistance of a research assistant (RA) who held a position in SVK Provincial Health Office. Although the researcher is not Laotian, she is able to speak and read the Lao language fluently. The researcher and RA made pre-fieldwork visits to each of the sample villages before the fieldwork of each village in order to make informal communication with villagers, especially village committees, and make logistical arrangements. These visits lasted for one day, except for the first village which was very far away, necessitating a visit of seven days.

The first sub-study fieldwork was conducted between December 2005 and April 2006. The researcher and RA stayed in each village for 10-18 days (depending on the size of the village), and completed the fieldwork in one village before moving to the next. During the period of staying with the villagers, there were opportunities for informal conversation which enabled the researcher to build a rapport with villagers as well as observe a real situation of well being in the village. In every village, according to local etiquette, the researcher was formally introduced and entrusted to the villagers' care by the director or a member of senior staff of the district health office (DHO). At the end of the study she was formally collected by staff of the DHO following a traditional farewell event arranged by the villagers.

The fieldwork for the first sub-study employed both quantitative and qualitative methods; (1) village censuses, (2) key informant interviews, (3) focus group discussions (FGDs), (4) household in-depth interviews and (5) household consumption survey. Details of each method are described in the following sections. In the first village, key informant interviews were conducted first, followed by FGDs, village census, household in-depth interviews and, finally, household consumption surveys. By the end of the fieldwork in the first village, it was found that the village census would be extremely helpful for developing rapport between the researcher and the villagers as well as obtaining good qualitative data. Therefore, for the remaining three villages, the sequence of methods was changed and the village census was conducted first, followed by key informant interviews, FGDs, household in-depth interviews and household consumption surveys. The difference in sequencing in the remaining three

villages did not have any effect on results of the study but it led to more effective data gathering.

Before the fieldwork, the issue of using a camera and tape recorder had been discussed with the director of DHO who did not anticipate any problem. Interviews were recorded at the beginning of the fieldwork in the first villages but proved to be problematic. For example many villagers were distracted by the tape recorder and wanted to listen to the recording of their own voice, others were afraid to talk while the recorder was working. It was therefore decided to stop recording and rely on notetaking for collecting qualitative data. The tape recorder was tested again at the beginning of the fieldwork in the second village and the result was similar to the first village. Thereafter, only notetaking was used. However, the respondents were co-operative and intermittently stopped talking or discussing in order to provide enough time for notetaking. At the end of every day, there was debriefing in order to summarize data, share notes and prepare tasks for the next day.

Village census

The objectives of the village census were: (1) to quantify household members' information on rates of self-reported illness, use of health services, costs of illness, type of coping strategy used, knowledge of exempting the poor, take up rate of exemptions and reasons for not taking up exemption if eligible and (2) to provide information for selecting household for in-depth interview.

The village census was applicable because the number of household in each village was low enough to conduct a cross sectional survey for all households in the village (62, 34, 36 and 40 in each of the four villages) which could depict the situation of the village from all households, not just the sampled households. It also provided a chance for every household to be a part of the study which could not happen with qualitative methods or even a sample household survey. This was important in the context of Lao where the community is communist. In addition, interviewing all the households in the village further developed rapport between the researcher and the villagers. Normally, at least one village committee member assigned by the village head would accompany the researcher and RA to each household for conducting the village census. This villager is hereafter referred to as the local administrator (LA). This was to facilitate the

village census and for the security of the researcher. Therefore, during the village census the researcher team consisted of three people; (1) the researcher, (2) RA and (3) LA.

The study questionnaire was developed by applying knowledge from several sources. A four-step construct of household decision-making on child health care consisting of perception of illness, care seeking, choice of provider and health care expenditure (Pokhrel and Sauerborn 2004) provided a guideline for questionnaire development on treatment seeking pattern. To make the questionnaire particularly suitable for the Lao context, many existing questionnaires related to socio-economic status and health systems in Lao were studied, for instance questionnaires of the Lao Expenditure and Consumption Survey III 2003, LECIII (Lao PDR 2003), and the Lao National Health Survey 2000 (National Statistical Centre 2001). Possible strategies to cope with financial costs were based on two articles and one thesis report namely 'Household Strategies to Cope with the Economic costs of Illness' by Sauerborn et al (1996), 'Ability to pay for health care: concepts and evidence' by Russell (1996) and the thesis 'Can household afford to be ill? the role of the health system, material resources and social networks in Sri Lanka' by Russell (2001). In addition, 'Microfinance Poverty Assessment Tool' of the World Bank (Henry et al. 2003) was also used to provide guidelines for food, hunger, dwelling and asset ownership indicators. The questionnaire was developed in English only, without translation into Lao, because all interviews were conducted by the researcher who asked questions in Lao and completed the questionnaire in Thai using Lao words.

The questionnaire comprised five main modules; (1) personal information about household members; (2) illness, treatment seeking pattern and direct financial costs due to illnesses – self-reported illness in the past two weeks and hospitalization in the past twelve months; (3) coping strategies to deal with costs of illness including exempting the poor; (4) household economic status and living arrangements including asset ownership and (5) immunization of children under 6 years old. Unfortunately, the last module, child immunization, was developed after the end of the first village census – when preliminary results from qualitative methods showed that only a few children had been immunized. Because immunization coverage represented a good indicator of

accessibility to public health services, the last module was developed for the rest of the villages. The questionnaire is shown in Appendix I.

Key informant interview

The objectives of key informant interviews were (1) to generate general information on the community and socio-economic well being of households, (2) to generate information about health care systems in the community such as number of health care facilities, location, transportation to the nearest public health care facilities, health care preferences, utilization patterns and barriers to access to services and (3) to develop rapport between the researcher and the community.

A semi-structured questionnaire (Appendix I) was developed for the interviews using preliminary results from the rapid visits to several villages. The interview was conducted using one questionnaire per village. Key informants were village committee members who were appointed by the district governor and some senior villagers, for instance a village founder, a local leader who normally conducted traditional spiritual ceremonies in the village.

Focus group discussion (FGD)

The focus group discussions had two main objectives; (1) to learn about community perceptions of user charges and exempting policy and the process of exemptions, including attitudes towards taking up exemptions and (2) to conduct a wealth ranking exercise within the village. The FGD was based on a semi-structured questionnaire which is shown in Appendix I.

In order to achieve the first objective of FGD, guidelines for discussion were developed focusing only on the exemption policy and process. However, information from the first and second villages clearly showed that none of the villagers had known about the exemption. Before conducting fieldwork in the third and fourth villages (in the non-poor district), informal discussions were held with the director of the district hospital and the head of the pharmacy department in order to probe the situation. The discussion suggested it was likely that as in the first and second villages, the villagers in the third and fourth villages would not be aware of the exemptions. These discussions, based on the officers' experience of the health protection system in Lao

PDR, led to further consideration of health financial risk protection for Laotians, including the non-poor. It was therefore important to solicit opinions from the villagers. In addition to the questions on exemption for the poor, questions on protecting non-poor people were inserted in the guideline of FGDs in the third and fourth villages. These included questions on the attitude of villagers towards voluntary or compulsory contributions to a health insurance scheme, level of acceptable premium and co-payment. It was, however, impractical to go back to conduct these questions in the first and second villages.

The second objective of FGD, ranking households in the village into wealth groups, comprised three elements: grouping households into different wealth groups, criteria for differentiating better-off and worse-off households, and establishing the proportion of the population that fell into each wealth group (Seaman et al. 2000). FGD members were firstly asked to rank households into different wealth groups. Based on the village census, the name of every household head was written in Lao and shown to all the FGD members, FGD members then classified each household head name into a wealth group based on their personal opinions. Initially, no specific wealth groups were indicated to FGDs in the first village. The results of the first village showed that three wealth groups were easily understood by villagers. Therefore, three wealth groups: better-off, middle and worst-off were applied in the remaining three villages. After completion of the wealth ranking, FGD members were asked about the criteria for classifying households into different wealth groups with open-ended questions. The proportion of the population falling into each wealth group was calculated later using household members from the village census.

In each village, three focus group discussions (FGD) were conducted with three different groups - the village committee, male villagers and female villagers with a variety of ages. FGD members of each of the three groups were recruited through consultation with the village head and some well-known villagers. FGD members consisted of a wide range of villagers in terms of gender, age and wealth group. Characteristics of FGD members are shown in table 3.4.

Table 3.4 FGD member of four villages

Village	FGD	Total members	Age, average (min-max)	Wealth group		
				Better-off	Middle	Worst-off
(1) TAL	Village committees	7	43 (29 – 63)	3	4	0
	Male	6	45 (22 – 61)	1	4	1
	Female	7	37 (27 – 50)	0	5	2
(2) KY	Village committees	6	43 (34 – 48)	3	3	0
	Male	7	49 (24 – 68)	4	2	1
	Female	7	49 (33 – 63)	2	4	1
(3) SPX	Village committees	11*	47 (28 – 72)	7	4	0
	Male	7	45 (39 – 59)	1	3	3
	Female	6	34 (18 – 49)	3	1	2
(4) KK	Village committees	8	56 (33 – 78)	3	3	2
	Male	6	41 (25 – 65)	2	1	3
	Female	9	49 (27 – 63)	7	2	0

Note: *FGD members of village committee group were all men except for one woman in SPX village.

Household in-depth interviews

Household in-depth interviews aimed to obtain detailed information on treatment options, costs, and coping strategies including exemptions. They mostly focused on how and why questions in order to understand the reasons for household decision making such as;

- Utilization pattern of the last illness episode: why did they choose this treatment and not others,
- Cost of treatment and coping strategies: how did they pay the health cost, why do they choose that strategy,
- Exemption mechanism: how do they get the exemption (explanation of the process), why they did or did not take the exemption, what do they expect from exemption.

Semi-structured questionnaires and observations were applied to sample households with the patient, breadwinner or carer. Using data from the village census, sample households for in-depth interview were purposively selected from those who had had experience of illness in the previous two weeks for conditions treated on an out-patient (OP) basis, and 12 months for admissions to a health facility and death. The wealth group of the household was also taken into account. Finally, in-depth interviews were carried out in a total of 29 households (table 3.5).

Table 3.5 Wealth group and type of illness of 29 households' in-depth interview

Village and wealth group		Type of illness					Total per village
		OP	Admission	Death	Combination*	Total	
(1) TAL	Better-off					0	8
	Middle	3		2	1	6	
	Worst-off	1			1	2	
(2) KY	Better-off	1	1	1		3	7
	Middle	1		1	1	3	
	Worst-off		1			1	
(3) SPX	Better-off		2			2	7
	Middle		1		2	3	
	Worst-off			2		2	
(4) KK	Better-off		2		1	3	7
	Middle	1	2			3	
	Worst-off			1		1	

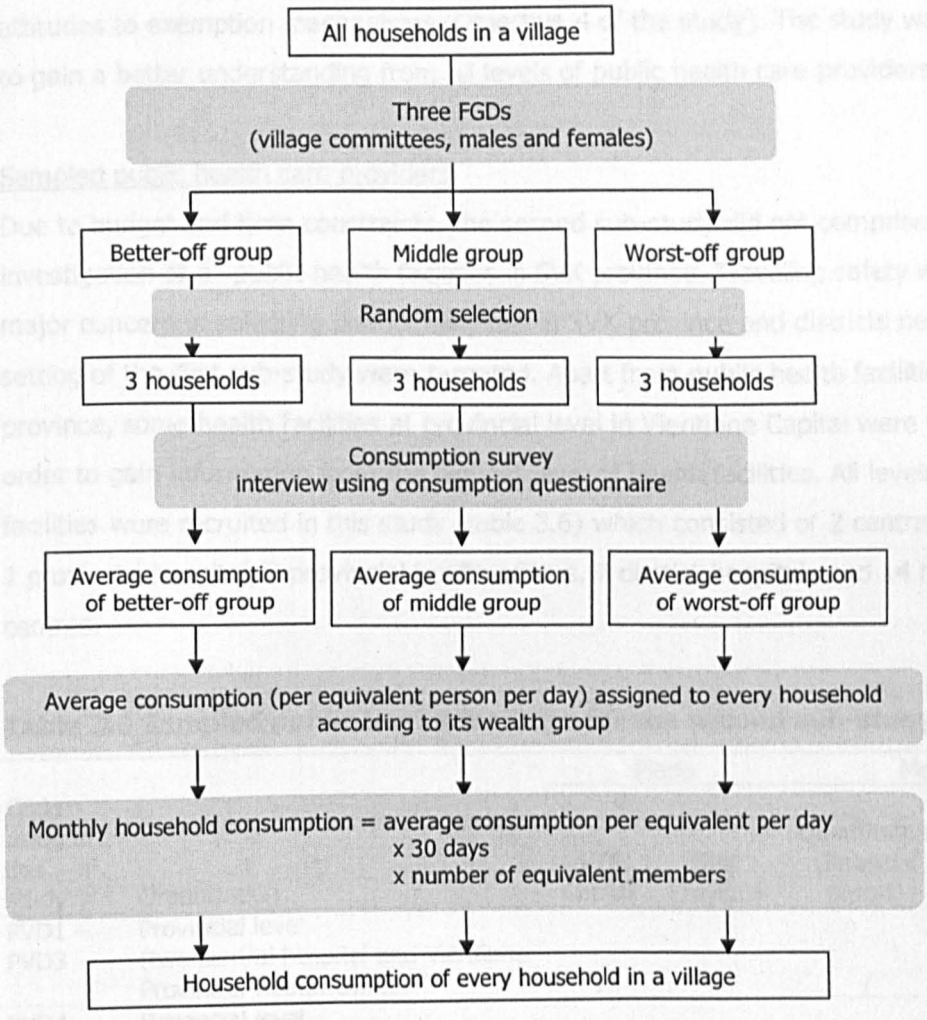
Note *refers to a combination of either OP or admission or death.

Household consumption survey

A measure of household economic status was required in order to identify household catastrophic health expenditure. Household consumption was chosen because these four villages had a subsistence economy and household income would have been difficult to quantify.

Ideally, information on household consumption would have been obtained from every household sampled but time constraints meant this was not possible. Instead, a practical framework for quantifying household consumption was constructed (figure 3.6) using both qualitative and quantitative approaches. It was constructed applying two main processes of the Health Economic Approach (Seaman et al. 2000) - to define categories of household wealth within the community and then, for each wealth category, to collect information of household budgets in a baseline year. With the aim of compiling consumption of a typical household, but not attempting to construct a statistically representative sample, based on wealth ranking, three households were randomly chosen from each wealth group in each village. A consumption questionnaire was developed applying food and non-food item questions from the Lao Expenditure and Consumption Survey III in 2003, LECIII, (Lao PDR 2003) and questions were asked based on three main sources for these items; own production, buying and gift. The consumption questionnaire was then applied to nine households in each village. An average consumption per equivalent person per day was calculated for each wealth group. Based on LESCIII, the equivalent members were at 1.0, 0.9, 0.7 and 0.4 for the first adult, other adults, children 7-15 years old and children less than 7 years old, respectively. An average household consumption was then assigned to every household according to the wealth group that the household belonged to. Finally, monthly household consumption for each household was calculated by multiplying average household consumption per equivalent person per day for 30 days a month by the number of equivalent members in a household. Household non-food consumption was calculated using a proportion derived from the consumption survey.

Figure 3.6 Diagram of methods used to quantify household consumption in a village



3.4.2 The second sub-study: public health care providers

The second sub-study was set up to assess public health care providers' behaviour and attitudes to exemption mechanisms (Objective 4 of the study). The study was intended to gain a better understanding from all levels of public health care providers.

Sampled public health care providers

Due to budget and time constraints, the second sub-study did not comprise a detailed investigation of all public health facilities in SVK province. Traveling safety was the major concern in selecting district hospitals in SVK province and districts near the setting of the first sub-study were targeted. Apart from public health facilities in SVK province, some health facilities at provincial level in Vientiane Capital were selected in order to gain information from the highest level of health facilities. All levels of health facilities were recruited in this study (table 3.6) which consisted of 2 central hospitals, 1 provincial hospital, 2 provincial health offices, 7 district hospitals and 14 health centres.

Table 3.6 Sampled public health facilities for the second sub-study

Code using in this study	Organization	Place		Method	
		VTE Capital	SVK Province	Quantitative (financial report)	Qualitative (key informant interview)
PVD1 – PVD3	Provincial level (two central hospital and Vientiane Provincial Health Office)	/		/	/
PVD4	Provincial level (SVK Provincial Health Office)		/	/*	/
PVD5	Provincial level (SVK Provincial Hospital)		/	/	/
PVD6 – PVD8	3 district hospitals in three poor districts		/	/	/
PVD9 – PVD12	4 district hospitals in four non-poor districts		/	/	/
PVD13	4 Health Centres in Phine, poor district		/	/	/
PVD14	3 Health Centres in APT, non-poor district		/	/	/
PVD15	7 Health Centres in another non-poor district		/	/	/

Note: * means financial report in Provincial Health Office format, presenting data of all hospitals in SVK (a provincial hospital and 14 district hospitals)

Conducting the fieldwork

In SVK province, every sampled public health facilities at provincial level and district level were visited and then staff were interviewed. Four health centres in Phine district and one health centre in APT district were visited. Owing to the distance of the other two health centres, the heads of the centres were invited to APT District Hospital and the study was conducted there. The heads of seven health centres in another non-poor district (PVD 15) were interviewed as a group at the district hospital.

In Vientiane (VTE) Capital, all sampled public health facilities were visited and staff interviewed. The researcher was accompanied by counterparts from the National Institute of Public Health (NIOPH) working on a related study on 'the formulation process of user fees and exemption policy in Lao PDR'.

Key informant interviews were carried out in each health facility and their financial reports were collected. Key informant interviews of health facilities at provincial level took 3-7 days per facility while in the district hospitals and health centres this took only one day per facility. The financial documents in fiscal year 2005 of each facility were copied or arrangements made for them to be forwarded to the researcher. Details of the key informant interviews and financial data collection are as follows;

Key informant interview

The objectives of the key informant interview at health facilities were (1) to generate information on background, funding, design and implementation of user fees and exemptions from the health care facility's point of view, (2) to determine attitudes on user charges and exemption policy from the public health care providers' perspective, (3) to explore criteria for a means testing mechanism at health care facilities and (4) to search for factors affecting the exemption practice at facilities.

Key informant interviews using a semi-structured questionnaire (Appendix I) were carried out with health personnel in high ranking positions in a health facility such as the director and/or the deputy director of the facility and heads of some departments in hospitals (e.g. pharmacy department, financial department and laboratory department) in order to gain a comprehensive understanding on the existing

exemption mechanism in health care facilities, how they treat the poor and the attitudes of providers to exemptions.

The main findings from health care facilities were intended to indicate how the system is working (process of exemption and who decides). Key variables needed from the health care providers' perspective were:

- Adjustment of fees and income criteria to changing economic circumstances. Who controls the fee policy of each facility?
- User fee revenue kept at facility
- Relationship between staff remuneration, user fee revenue and exemptions
- Existence and level of compensation on exemptions and time frame of compensation
- Who decides means testing? What criteria are used for means testing?
- Encouragement of patients to take up exemptions by health staff
- Alternatives to the exemption mechanism, how to finance (tax, pre-payment), which option is feasible, not feasible, who and what package will be protected, priority setting.

Secondary data collection on hospital financing

Objectives of collecting financial data were (1) to have a thorough understanding of in-flow and out-flow of financial resources of public health facilities, (2) to measure the level of revenue from user fees and expenditure from user fee revenue, including for exemptions and (3) to evaluate the effectiveness of exempting the poor in practice in terms of leakage.

The financial report for fiscal year 2005 of each health facility was examined. Variables needed from the financial report were:

- Total hospital revenue disaggregated by sources of revenue (budget for salary and materials, user charge for drugs, laboratories, accommodation)
- Total hospital expenditure disaggregated by types of expenditure such as salary, over time payment, drugs, public utilities, medical supplies, diagnostic reagents, other materials and total amount of exemption
- Outputs of health care facilities for example number of out patient visits, number of admissions and total length of stay.

- Details of user charges by number of patients and amount classified by type of services such as out-patient, in-patient, diagnostic or accommodation in order to see magnitude, and its impact on total revenue from user fees.
- Number of people receiving exemptions and the amount of exemption by categories of patient (civil servant, monk, student, the poor and other).

Even though all the district hospitals in SVK province were not visited, their summary financial report could be obtained from SVK Provincial Health Office. However, although these summary reports presented some information, not all were as detailed as the full financial report available at the health facility.

3.4.3 The third sub-study: policy maker perspective

The third sub-study aimed to (1) generate information on background, funding, design and implementation of user fees and exemptions from the policy makers' points of view, (2) determine attitudes on user charges and exemption policy from the policy makers' perspective and (3) evaluate attitudes on effectiveness of exempting the poor in terms of leakage and under-coverage. Key informant interviews and reviewing documents were applied to obtain information from the policy makers' perspective.

Key informant interviews using a semi-structured questionnaire were applied to key informants who were policy makers in the Ministry of Health such as minister, Secretary General of MOH and some heads of department in MOH, as well as the director and some heads of department in the National Institute of Public Health (NIOPH) and other relevant organizations e.g. Poverty Reduction Fund. A total of 22 policy makers and policy relevant people (table 3.7) were interviewed. All the interviewees were men staying in Vientiane Capital. At the beginning, a number of potential interviewees were purposively selected by the researcher on the basis of current policy makers who were directly involved in the user fee and exemption policy. The list of key informants interviewed was eventually expanded to cover current- and ex-policy makers mentioned by other respondents or emerging from other sources of information during the fieldwork. The interviews were carried out in Lao by the research team without tape recording. The research team consisted of 2-3 health staff of the NIOPH and the researcher. The interviews were conducted in Vientiane Capital between April and May 2006.

Reviewing relevant documents on user fees and exemptions was used as a supplementary method to gain more understanding of the exemptions endorsed by the government.

Table 3.7 List of key informants on policy maker perspective

Code	Organization	Age, average (min-max)	Role
PMK1 – PMK15	Ministry of Health	57 (45 – 70)	3 Policy formulation in a past position 2 Policy direction at current position 2 Policy implementation 1 Implementation of CBHI 1 Implementation of primary health care 3 Implementation of RDF 3 Revision of policy
PMK16 – PMK17	School of Public Health, National Institute of Public Health	53 (50 – 56)	Training centre for health staff
PMK18 – PMK20	Ministry of Finance	45 (36 – 50)	1 Budgeting, 2 Practice of obligatory remittance
PMK21	Poverty Reduction Fund	54	Poverty eradication project 2003 – 2008
PMK22	Independent consultant of WHO, Lao PDR	40	WHO consultant on implementation of RDF

The main features on exemption policy from the policy makers' view point included the following variables:

- The purpose of user fees.
- Adjustment of fees and income criteria to changing economic circumstances.
- Existence and clarity of national policy on exemptions.
- Public resources available to finance exemptions.
- Who decides means testing? What criteria are used for means testing?
- Relationship between criteria and national poverty criteria.
- Alternatives to an effective exemption mechanism, how to finance (tax, pre-payment), which option is feasible, not feasible, who and what package will be protected, priority setting.

3.4.4 The workshop after the completion of the fieldwork

Following completion of the fieldwork, two one-day workshops called 'Consultative Meeting on Health Care Financing for the Poor in Lao PDR' were held in Vientiane Capital on 17-18 July 2006. The workshop served two linked studies on user fees and exemptions in Lao PDR. One was the first, second and third sub-studies of this thesis. Another was a collaborative study involving the National Institute of Public Health, Lao PDR (NIOPH) and the International Health Policy Programme, Thailand (IHPP) with the support of the Consortium for Research on Equitable Health Systems (CREHS). It was conducted during April-May 2006, aimed at describing the process of formulating user fees and exemptions policy and used a literature review and in-depth interviews of key informants.

The objectives of the workshop were (1) to report back on the two studies in Lao PDR on user fees and exemption policy to audiences, (2) to verify preliminary results with Lao partners and (3) to discuss ways of protecting the poor in Lao PDR. No key respondent in the study understood the whole story of this thesis so the workshop provided a great opportunity to inform them and acknowledge their contribution to the study. Participants in the workshop were all key partners at all levels including policy makers, public health care facilities and village heads who were directly involved in the studies (table 3.8).

Table 3.8 Two one-day workshops at the end of the fieldwork

Meeting date	Participants	Chaired by	Agenda (same agenda for 2 days)
Monday 17 July	Policy makers e.g. MOH, MOF, Poverty Reduction Fund, World Bank, WHO, National Institute of Public Health, School of Public Health (A total of 23 participants)	Vice Minister of Health for the whole day meeting	Four main topics: 1. User fee policy formulation (presented by NIOPH) 2. User fee and exemption policy implementation, provider response and household implication (presented by the researcher) 3. Health systems in resource constrained setting: international experiences (presented by the supervisor) 4. Discussion (led by the researcher)
Tuesday 18 July	Providers and people from SVK Province e.g. provincial health office, provincial hospital, district hospitals, health centres and village heads (A total of 29 participants)	Morning: NIOPH Director Afternoon: NIOPH Deputy Director	

3.4.5 The fourth sub-study: improving protection of the poor

The fourth sub-study aimed to analyse the financing models of alternative protection mechanisms, identify its financial implications and provide recommendations on improved ways of protecting the poor. Findings from the first, second and third sub-studies, including the workshop at the end of the fieldwork, as well as information from relevant documents, were used as inputs for the analysis of the fourth sub-study.

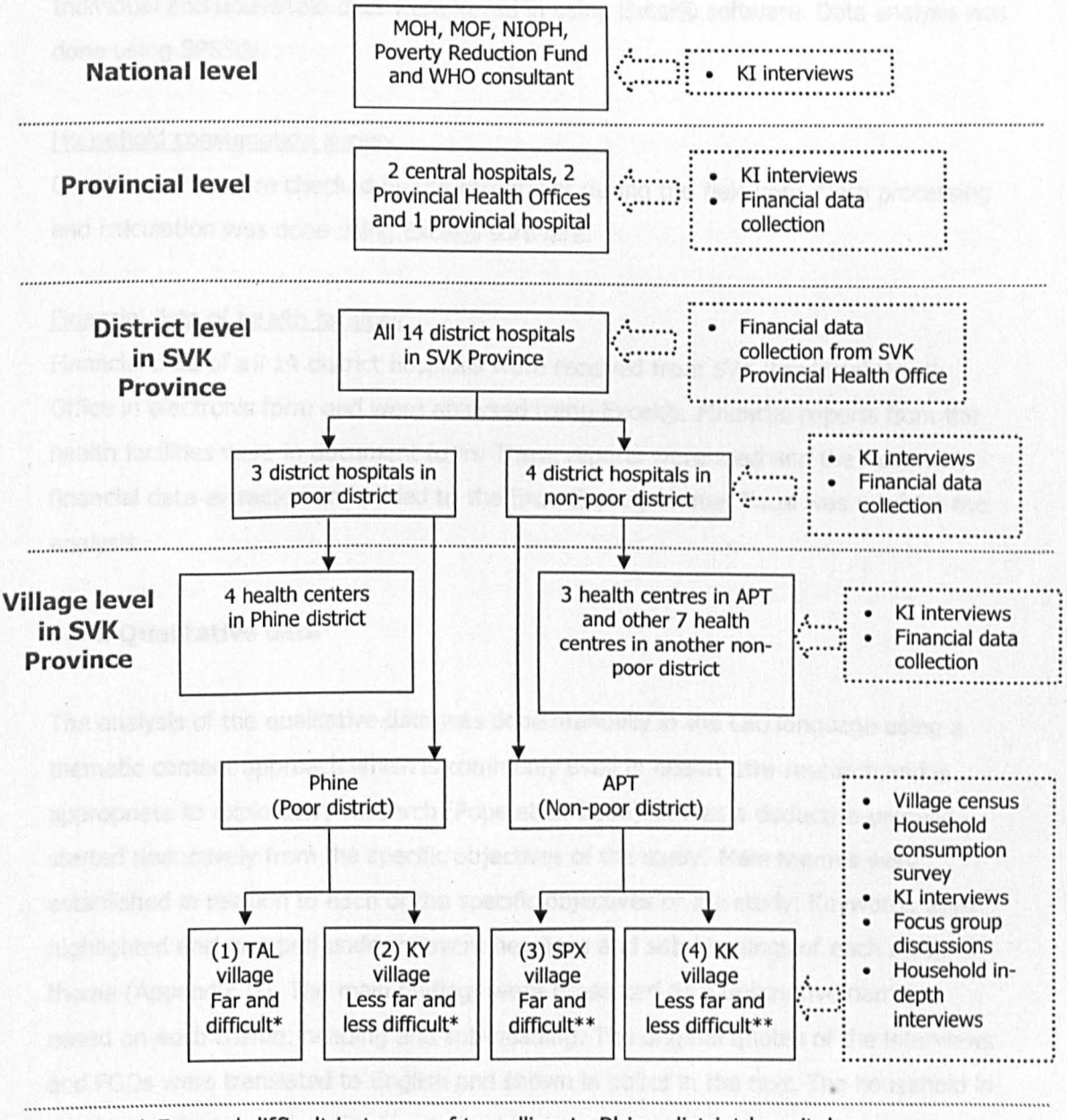
A literature review on financial protection was done at the beginning of the study and during the study period. Initially, relevant literature was searched for in PubMed and the catalogue of the LSHTM library with key words of: user fees, exemptions, targeting, the poor, protection mechanism. During the study, many relevant documents on Lao PDR were obtained from many sources. For example, government regulations and laws relating to health financial protection were obtained from the Ministry of Health, Ministry of Finance and health care providers. Statistical reports of the country and provinces were obtained from the National Statistical Office, the Ministry of Health, the Provincial Health Offices and the web.

The analysis of the fourth sub-study is presented in chapter 8 of the thesis. It shows the financial implications for health care provider budgets of various options for protection mechanisms and discusses better ways to provide health financial risk protection for the poor. Expenditure of health services for beneficiaries was estimated under the status quo and several financing models. Financial resources to subsidize health facilities were also investigated under several options e.g. general tax revenue, premium paid by household and donors.

3.4.6 Overview

In summary, the study applied several methods (both quantitative and qualitative approaches) to all levels of key stakeholders involved in user fees and exemptions policy (figure 3.7)

Figure 3.7 Diagram of samples and methods for this study



Note: * Far and difficult in terms of travelling to Phine district hospital.

** Far and difficult in terms of travelling to APT district hospital

3.5 Data processing and data analysis

3.5.1 Quantitative data

Village census

Questionnaires were checked by the researcher on a daily basis during the fieldwork. Individual and household data were keyed in using Excel® software. Data analysis was done using SPSS®.

Household consumption survey

Questionnaires were checked by the researcher during the fieldwork. Data processing and calculation was done using Excel® software.

Financial data of health facilities

Financial data of all 14 district hospitals were received from SVK Provincial Health Office in electronic form and were analysed using Excel®. Financial reports from the health facilities were in document form. These reports were read and the necessary financial data extracted and added to the Excel® programme. Excel was used for the analysis.

3.5.2 Qualitative data

The analysis of the qualitative data was done manually in the Lao language using a thematic content approach which is commonly used in health care research and is appropriate to exploratory research (Pope et al. 2006). It was a deductive process – started deductively from the specific objectives of the study. Main themes were established in relation to each of the specific objectives of the study. Keywords were highlighted and grouped under relevant headings and sub-headings of each main theme (Appendix II). The main findings were presented as a descriptive narrative based on each theme, heading and sub-heading. The original quotes of the interviews and FGDs were translated to English and shown in italics in the text. The household in-depth interviews are described household by household in boxes.

3.6 Quality control of the study

3.6.1 Potential biases from the researcher, RA and health staff

The position of the researcher and RA in the research process is important to the quality of qualitative research. The researcher has held a position in the Thai Ministry of Public Health. She also has previous experience of the Lao health system having worked as a consultant between 2003 and 2004 which meant she had previous contacted with some health staff in SVK province and Vientiane Capital but had never had contact with the villagers. The RA had worked in some district hospitals in SVK Province before moving to SVK provincial health office. Due to her current position in the provincial health office, she had professional activities with health staff of district hospitals in SVK province. In addition, her father was well-known in SVK province because he was a district governor before retirement.

The fieldwork of each sub-study was officially started and ended according to the Lao culture. As stated earlier, in the first sub-study, the arrival and departure of the researcher team were facilitated by the director or senior staff of the district health office. In the second and third sub-study, the sampled providers and policy key informants were formally notified by official letter from SVK provincial health office or by the NIOPH for those in Vientiane Capital.

These facts might have influenced the villagers' and respondents' responses in terms of trying to please the researcher and the RA. It is more likely that the respondents provided information on all aspects of the study. Nonetheless, the study investigated facts or past experiences of respondents, not their attitude towards health services or health staff behaviour. It was common that all respondents described the limited resources of their situation. The villagers substantially said they were very poor. The providers frequently mentioned insufficient resources for operating hospitals. The policy makers often referred to inadequate resources of Ministry of Health and government as a whole. However, these data could be triangulated with other sources of data as described in the next section.

3.6.2 Validity and reliability

The quality of qualitative research is another major concern. In order to improve the validity and reliability of investigation, this study applied cross-checking as suggested by Seaman et al. (2000). This included many forms as follows;

A. Participants checking. This process was carried out during the interviews or FGDs. The advantage of no tape recorder was that the researchers intermittently took notes during the interview/FGD and then read them back to the respondents to test the validity of the notes. This facilitated a lively discussion within the group.

B. Cross-checking of the results between groups of FGD. For example the results of wealth ranking among three FGDs in the village.

C. Cross-checking between the researcher, RA and the local administrator (LA), a villager who accompanied the researcher and RA during the village census. At the end of every day in the village, the researcher, RA and LA had a debriefing session in order to summarize main findings of the day, share information, discuss achievements and challenges of the day and then prepare tasks for the following day.

D. Triangulation of data across sources. Results from many sources were gathered together and compared. This was a very useful approach for validating subjective information from respondents and tangible information, for example;

    D1. Results of wealth groups from FGDs were compared with quantitative information from village census e.g. availability of own rice products for household consumption in the past year, housing material and assets (more detail in chapter 4).

    D2. Providers' perception on inadequate resource to operate the hospital was verified with financial reports from the hospital on government budget expenditure and user fee revenue.

    D3. Policy makers' perception of insufficient government resources was compared to financial information from the official gazette.

The first three forms of cross-checking (A – C) and the first example of the last form (D1) above were done during the fieldwork period while the last two examples of the last form (D2 and D3) were done after the fieldwork during the analysis period. During

the fieldwork, when major inconsistencies arose, the researcher consulted the RA, the LA and the village head. Sometimes, it was re-confirmed with the original source. When there was a rational explanation, the majority opinion among the groups was accepted. For example; one household was ranked into the better-off group by the female FGD but the worst-off group by the other two FGDs. Cross-checking with information from the village census showed that it was comparatively poor. Subsequent checking with two females of FGD members confirmed that although they believed the household should be in the worst-off group, the father of the household head was a founder of the village and the women considered it inappropriate to categorise his household as worst off. After discussion between the researcher, the RA, the LA and the village head it was agreed it should be the worst-off group.

3.7 Limitations of the study

One limitation of this research was the study setting. The households' perspective was from four villages in one province and they cannot represent all Laotians in the country or even all villagers in the province. The providers' perspective was from some districts of two provinces and they cannot represent all provinces of the country. Findings on health-seeking pattern, impact of illness costs on household consumption and coping strategies of the villagers varied across villages and districts and cannot be generalised to other provinces, especially villagers with different ethnicity. Even in the same province, it could be seen that providers' practices on the exemption policy varied across districts. However, the findings reflect fundamental information on how villagers react to their illnesses, the consequences of illness to the household economy, how well the villagers were protected by the exemption policy and the challenges of improving protection for the poor.

The aim of this thesis was to obtain insight into the exemption policy to protect the poor from paying user fees to public health providers which automatically excluded private practices from the providers' perspective. Evidence from the national health account in 2001 showed that about two-thirds of out-of-pocket in Lao PDR was spent on user fees for private services (WHO 2003). These meant that health financial risk protection not only in the public sector but also in the private sector is significant.

This study mainly focused on inaccessibility to health services due to geographical and financial barriers. Some barriers were not investigated in detail such as quality of care and cultural barriers. These barriers might affect households' decision making on choosing public or private services.

Two one-day workshops were arranged at the end of the fieldwork as mentioned earlier. One of their objectives was to verify the analysis and interpretation of preliminary findings with the key stakeholders. Nevertheless, only the main points of the first, second and third sub-studies could be presented in the workshops due to the time limitations.

Despite these limitations, this study can contribute to debates about how to improve public health financial risk protection for the poor in Lao PDR in particular, as well as developing countries in general.

CHAPTER 4
HOUSEHOLD WELL BEING

4.1 Introduction

This chapter responds to the first objective of the study (to assess the socio-economic circumstances of villages and distinguish poverty differences between households). It presents information from the four selected villages in two districts of SVK province which is useful for understanding the situation of the households. Methods used are presented in the next section. The findings are presented according to two main topics; characteristics of the four villages and the poverty assessment of the households. Three main aspects - living conditions, health facilities near the village and the situation of maternal and child health in the village, are used to explain different characteristics of the villages. Four parameters, namely wealth groups, household consumption, an asset index and food security are used to demonstrate the poverty of the villages and the households. An overview of findings and discussion are presented in the last section of the chapter.

4.2 Methodology

A combination of qualitative and quantitative approaches was used to obtain information from the households. These methods included key informant interviews, focus group discussions (FGDs), a village census and a consumption survey. In each village, semi-structured interviews were applied to village committee members and key informants in order to understand the general context of the village, especially livelihoods, treatment choices around the village and treatment preferences of the villagers. Three focus group discussions were separately conducted with three different groups - the village committee, male villagers and female villagers – each including a wide range of people in terms of age (range from 18 to 78 years old) and wealth groups (better-off, middle and worst-off group). Members of each of the three FGD groups were recruited through consultation with the village head and some well-known villagers. FGDs were conducted for many objectives but for this chapter, the FGD was used mainly for classifying households in the village into three groups (the better-off, middle and worst-off group), or 'wealth ranking', according to a consensus of the

members using their own criteria. The village census, with a structured questionnaire including asset indicators and food security, was applied to all households in the villages. The study was not able to quantify the consumption of every household in the villages so a consumption survey was applied to sample households. According to the result of the FGDs, three households were randomly chosen for each wealth group. After that the consumption questionnaire was applied to all nine households in a village. Mean consumption per equivalent person per day was calculated for each wealth group in the four villages and is presented in this chapter. The process of estimating consumption of every household based on data from the consumption survey was earlier presented in the methodology chapter. Household consumption is used as the denominator for calculating the health financial burden of the household (health expenditure as per cent of household consumption) in the following two chapters.

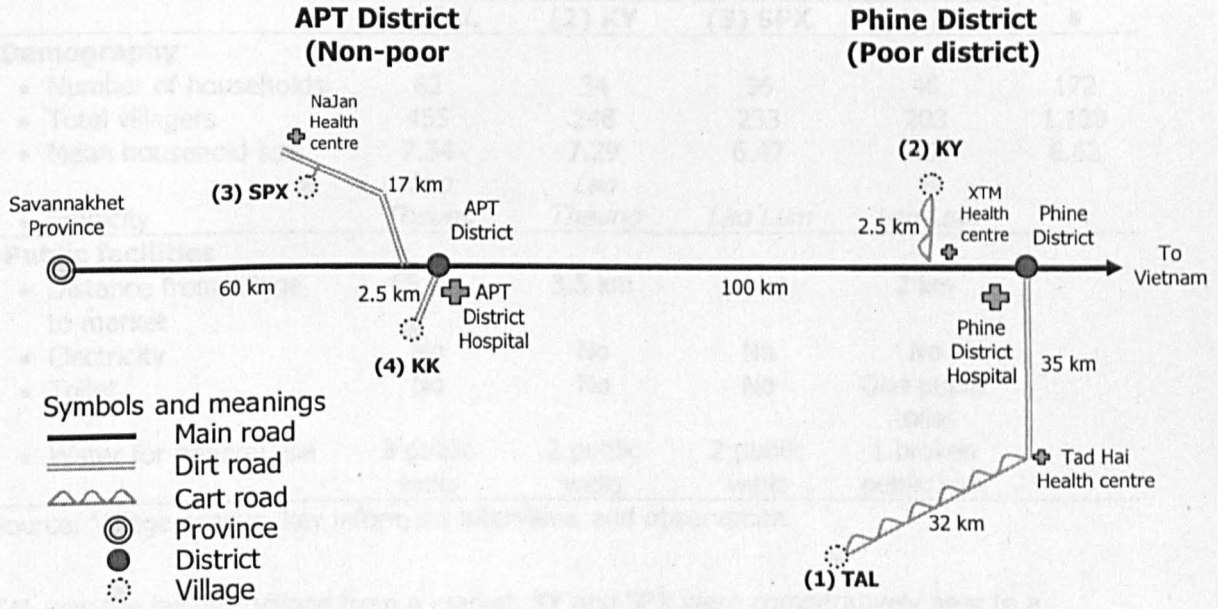
Analysis of quantitative data was done by SPSS® and Excel®. Principal Component Analysis (PCA) was applied to asset indicators obtained from the village census in order to calculate an asset index score for each household. A mean asset index score of each wealth group in each village was estimated. Analysis of qualitative data was manually done using a thematic content approach.

4.3 Characteristics of the four villages

4.3.1 Living conditions of the villagers

The study was carried out in four selected villages in two districts in Savann khet province. The first two villages, Tang A Lai (TAL) and KaYong (KY) Village, belong to Phine District, a poor district[5] and the other two villages, Sisapanxai (SPX) and KokKong (KK), belong to Atsaphangthong (APT) District, a non-poor district[5]. TAL and SPX were relatively far from the main road compared to KY and KK (figure 4.1).

Figure 4.1 Model of mapping of the four villages



[5] According to NGPES 2004, National Growth and Poverty Eradication Strategies.

Table 4.1 summarizes the main characteristics of villagers and of the four villages. Villagers in the two selected villages in Phine District were *Lao Theung* [6] while those in APT District were *Lao Lum*. The four villages had a similar population structure. The majority of village members were in the reproductive age group while a minority was in the elderly group. Numbers of males and females were fairly equal in the four villages. Neither births nor deaths were registered in the four villages. No villagers had identity cards. KY village showed the lowest education indicators - 12% adult literacy rate and 4% school enrolment among children 6-10 years old. The other three villages had adult literacy rates of 31%-42% and school enrolment of 65% - 89%.

Table 4.1 General information on the four villages

	Phine District (Poor district)		APT District (Non-poor district)		Four villages
	(1) TAL	(2) KY	(3) SPX	(4) KK	
Demography					
• Number of households	62	34	36	40	172
• Total villagers	455	248	233	203	1,139
• Mean household size	7.34	7.29	6.47	5.08	6.62
• Ethnicity	*Lao Theung*	*Lao Theung*	*Lao Lum*	*Lao Lum*	
Public facilities					
• Distance from village to market	65 km	3.5 km	17 km	2 km	
• Electricity	No	No	No	No	
• Toilet	No	No	No	One public toilet	
• Water for general use	3 public wells	2 public wells	2 public wells	1 broken public well	

Source: Village census, key informant interviews and observation

TAL was the farthest village from a market. KY and SPX were comparatively near to a market, while KK was the nearest. There was no public transport reaching any village. The most popular form of transportation was the Tak-Tak, a multi-purpose engine used by farmers (figure 4.2). Villagers had difficulty accessing telecommunications such as public telephone or post office. There was no electricity supply in any village. The light source is a torch, dung or battery. Neither public nor private toilets were

[6] Three main ethnic groups in Lao are *Lao Lum* (low land, 66% of total population), *Lao Theung* (mid land, 24% of total population) and *Lao Sung* (high land, 10% of total population).

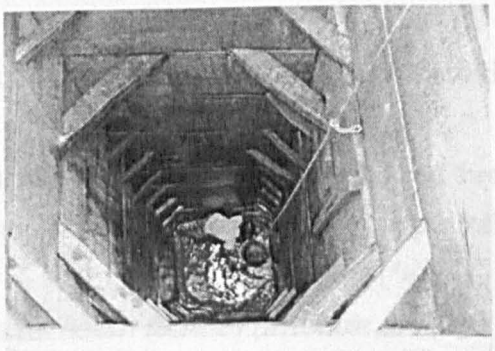
available in the villages except KK. There was one public toilet in KK but the villagers rarely used it, using instead the bush or field.

Figure 4.2 Tak-Tak, the preferred transportation of the villagers

Tak-tak is a diesel engine with additional equipment for ploughing and a wooden cart for transport.

One to three public well water machines, sealed with hand-pumps, were available in each village. However, KK village had only one public well water machine and it had broken 1-2 months before the fieldwork period. All KK villagers relied solely on a deep waterhole surrounded by a wood which was approximately 1 kilometre from the village (figure 4.3). There was a severe drought during the dry season, including the fieldwork period. Although public wells were available in the villages, the main source of drinking water was pond water. Almost all villagers normally drank water from ponds without boiling it.

Figure 4.3 Drought in KK village



Severe drought during April 2006

A deep waterhole, 1 km's walk

The villagers maintained a subsistence economy in the village and mostly consumed their own products (glutinous rice) and collected wild vegetables (e.g. bamboo,

mushroom) and animals (e.g. snake, mouse, cricket and frog). The villagers in these four villages had a similar habit of eating. Meals were served in a shared container for everybody. Everyone ate with his/her hands. Soup was eaten with a shared spoon for everybody. Water was drunk with a shared cup.

Villagers had established relationships with persons both inside and outside the village. In the same village, members were likely to be related in some way. Moreover, they had inter-household connections for social events, as well as for routine life such as cooperative farming and meal sharing. Village governance was managed by an elected administrative committee consisting of a village head and a village committee who were in charge of economic affairs, self-defense, agriculture and social events. Nonetheless, villagers' feeling of loneliness and lack of social support was found in KK village. The KK village head and villagers had pleaded for help from the district hospital for repairing a broken public well but their pleas had been rejected. They felt that they were unable to access any support and were completely alone in confronting the drought.

> *'We requested help from the district hospital. A staff member said he could not help. He did not have a device and that's it... We tried to fix it ourselves but could not buy the necessary piece of equipment in the district market.... Nobody could help us. We gave up fixing it.'*
>
> (Key informant interview: KK village committee members)

4.3.2 Characteristics of health facilities

Health facilities were categorized into three groups; local facilities at village level, private providers and public providers (table 4.2).

Local health facilities (available at village level): Village health volunteers (VHV) and revolving drug funds (RDF) were available in all four villages. However, the RDF did not work well in any of the four villages. Only 3-4 items of medicine were available compared to a total of 27 items at RDF initiation. Some expired medicines were still in cupboards. Nonetheless, the RDF in SPX was relatively well used by the villagers, but mostly for one item of analgesic medicine. A trained traditional birth attendant (TBA)

was also available in all the villages except TAL. According to the culture, pregnant women were not comfortable receiving services from a male TBA. The male TBA at KY and SPX never provided ANC or delivery services to pregnant women unlike the female TBA in KK. Apart from government authorized local health facilities, traditional healers, herbs and traditional ceremonies were also the main sources from which villagers sought services for their illness. A traditional healer mainly applied *Seang-Pao* and/or herbs to patients. *Seang-Pao* was an animistic belief that a village healer could explain a cause of illness (such as spirits from forest or rice field or house) and would treat it by blowing an alcoholic beverage from his mouth to the patient in order to exorcise the malevolent spirit from the patient. The healer might or might not give the patient herbs depending on the patient's condition. Herbs could be applied without *Seang-Pao*. There were some other traditional approaches applied to patients such as *"Puk Khan"* and *"Heet"*. The *Puk Khan* was a ceremony that calls all thirty-two spirits back to the sick person as the villagers believed that illness occur when one or more of spirits left the body. Cotton strings were tied around the wrists of the patient to keep the spirits in place. Normally, the *Puk Khan* was performed after recovering from an illness and to greet a newborn. The *Heet* was a special event of the offering ritual. The village spirit specialist, called a *Sanadee*, who was the executive local authority, presided over the *heet* which involved the sacrifice of an animal - usually a buffalo or a cow – and offering of rice liquor.

Private providers: comprised private practitioners, private drug stores and private clinics. Private practitioners were unregistered and worked as a private business. Some often came to the villages, especially in TAL, but some practised at home. The villagers could access private drug stores and private clinics which were normally near a market.

Public providers: comprised health centres, district hospitals and provincial hospital. According to the zones of public health responsibility, TAL, KY and SPX belonged to a nearest health centre but KK belonged to a district hospital because it was close to the district hospital. TAL was farthest from all levels of public providers and TAL villagers had the most difficulty to reach any level of public provider. KY and SPX were comparatively near to the public providers. KK was nearby the district hospital and not far from a provincial hospital.

In terms of physical geography, local health facilities were the easiest accessible option for the villagers in every village. TAL was the farthest village from both public and private providers, KY and SPX were comparatively near, whereas KY was the nearest village to both public and private providers.

Table 4.2 Health facilities of the villages

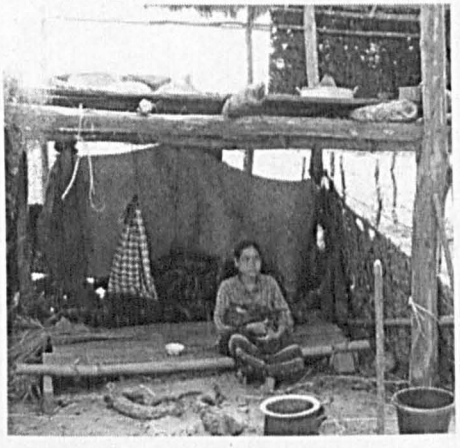
	Phine District (Poor district)		APT District (Non-poor district)	
	(1) TAL	(2) KY	(3) SPX	(4) KK
1. Local facilities				
• Traditional healers, herbs, traditional ceremonies	Available	Available	Available	Available
• Village health volunteer (VHV)	1	1	1	1
• Revolving drug fund (RDF) at village level	Yes but not functioning	Yes but not functioning	Yes and limited functioning	Yes but not functioning
• Trained traditional Birth Attendant (TBA)	No	Male TBA	Male TBA	Female TBA
2. Private providers				
• Private practitioners	Farthest but often come to the village	Comparatively near	Comparatively near	Nearest
• Drug stores and private clinics in market	Farthest	Comparatively near	Comparatively near	Nearest
3. Public providers				
• Nearest health center (km from the village)	35 km	2 km	2 km	NA (catchment area of district hospital)
• District hospital (km from the village)	67 km (8 hours by Tak-tak)	20 km (40 minutes by Tak-tak)	17 km (40 minutes by Tak-tak)	1.5 km (30 minutes by walk)
• SVK provincial hospital (km from the village)	227 km	145 km	77 km	62 km
4. The most preferred health facilities	Traditional healers, private practitioners who often visited the village	A private clinic run by ex-health staff of health centre	Traditional healers, health centre	A traditional healer, private drug stores, district hospital

Source: Key informant interviews and FGDs

4.3.3 Basic maternal and child health services

Evidence from the village census showed poor maternal and child health services for the villagers. Although few pregnant women had received ANC and only around 14% of total live births were attended by skilled health personnel, there had been no maternal mortality in the twelve months prior to the interview. Normally, women gave birth at home or in a farmhouse in a rice field with or without assistance from her husband or relatives or TBA. Women usually gave birth on the ground in a temporarily built shed beside a house and then continued post natal living for 7 days in the shed (figure 4.4).

Figure 4.4 Temporary shed for delivering



The villagers normally made a fire burn for boiling water all day nearby the shed. Six babies out of a total of 50 live births died during the previous 12 months (table 4.3).

Table 4.3 Some indicators of maternal and child health in the villages

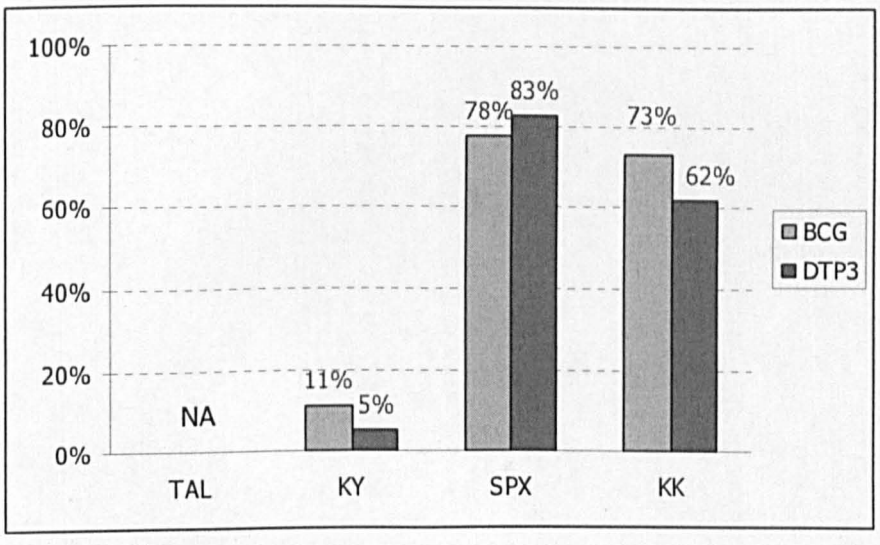
	Phine District (Poor district)		APT District (Non-poor district)		Four villages
	(1) TAL	(2) KY	(3) SPX	(4) KK	
Pregnant women with at least one ANC / total pregnancy during the fieldwork period	0/6	1/2	5/11	2/2	8/21
Births attended by skilled health personnel* / total lived births, during the previous twelve months	0/22	5/12	0/12	1/4	7/50
Infant death / total lived births, during the previous twelve months	1/22	0/12	5/12	0/4	6/50

Source: Village census

Note: * 'skilled health personnel' refers to an accredited health professional – such as a midwife, doctor or nurse – who has been educated and trained to proficiency in the skills needed to manage normal pregnancies. Traditional birth attendants (TBA) are excluded. (WHO, 2004)

Concerning child health, BCG and DTP3 coverage were selected to show child immunization performance in the village. SPX and KK had high BCG and DTP3 coverage while KY had particularly low BCG and DTP3 coverage (figure 4.5). Unfortunately, the questionnaire on child immunisation was developed just after finishing the fieldwork in TAL so it was applied to the other three villages (KY, SPX and KK), but not TAL. Nonetheless, the village head of TAL said that child immunisation coverage might be very low because many women took their children away when health staff came to give immunisation. In addition, many women in TAL said that they were not convinced about immunisation and sometimes the children had fever after the immunisation.

Figure 4.5 BCG and DTP3 coverage in the villages



Source: Village census

4.4 Poverty assessment

This section presents four main parameters used for assessing the poverty of the four villages and households of the villages. First, within the village every household was categorized by the FGDs into three wealth groups; better-off, middle and worst-off group. Second, a consumption survey of sampled households was employed to obtain a mean household consumption of each wealth group. Third, an asset index of each wealth group was computed and is presented. Finally, food security of the villagers is demonstrated by two indicators; insufficient own rice products and hunger.

4.4.1 Wealth groups

For each village, not more than one third of the total households (as well as villagers) were classified by the FGDs into the worst-off group (table 4.4).

Table 4.4 Household wealth ranking by three FGDs in each village

	Phine District (Poor district)		APT District (Non-poor district)		Four villages
	(1) TAL	(2) KY	(3) SPX	(4) KK	
Total households	**62**	**34**	**36**	**40**	**172**
• Better-off	11%	26%	39%	38%	26%
• Middle	63%	47%	31%	30%	45%
• Worst-off	26%	26%	31%	33%	28%
Total villagers	**455**	**248**	**233**	**203**	**1,139**
• Better-off	13%	31%	47%	45%	30%
• Middle	64%	46%	30%	27%	47%
• Worst-off	22%	23%	23%	28%	24%

Source: Households from village census classified by wealth groups from FGDs.

After the ranking, the FGDs discussed what criteria they used for classifying households and which criterion was more important than the others. Although the twelve FGDs were conducted in different places and times in the four villages, all twelve FGDs had the same four main criteria for classifying households into three wealth groups. These criteria were as follows;

1. Rice (the most important criterion) - own rice production adequate for whole year's consumption. Everyone agreed that the better-off household could produce rice not only for household consumption but also for trading whereas the worst-off household did not have enough rice for household consumption.

2. Housing materials in terms of permanent and non-permanent material. The house of the better-off was built from permanent material such as corrugated zinc sheeting and wood while the worst-off group had less permanent housing materials such as bamboo, dry leaves or dry straw which had to be repaired every 1-2 years.

3. Livestock Buffalo and cows were the most valuable and important livestock. In addition, they were not only assets but also a resource for rice cultivation. The better-off households usually owned many while the worst-off household might own only a few or none.

4. Clothes and household equipment Normally, FGDs referred to clothes, kitchen utensils and sleeping materials in terms of quantity and quality.

4.4.2 Household consumption

In the consumption survey of nine sampled households in each village, the mean household consumption of three sampled households per wealth group was calculated. Overall, villagers of the four villages lived on less than one dollar per person per day (0.8 USD per person a day). In terms of consumption by villages, KK villagers lived on 1.29 dollar per person per day while villagers in the other three villages (TAL, KY and SPX) lived on less than one dollar per person per day (table 4.5). The worst-off group of all villages lived on less than one dollar a day. The profile of non-food and food consumption showed that, overall, villagers spend more on food than non-food. More than two thirds of total consumption was for food.

Table 4.5 Mean household consumption and profile of non-food and food consumption from consumption survey of sampled households

	Phine District (Poor district)		APT District (Non-poor district)		Four villages
	(1) TAL	(2) KY	(3) SPX	(4) KK	
Mean HH consumption (USD/equivalent person/day)					
• Better-off	1.05	0.84	1.02	1.71	1.15
• Middle	0.68	0.42	0.42	1.42	0.73
• Worst-off	0.44	0.27	0.65	0.81	0.54
• Overall of three groups	0.69	0.51	0.72	1.29	0.80
• Two villages in the district	0.61		1.00		
Mean profile of non-food and food consumption					
• Better-off	30:70	23:77	36:64	39:61	32:68
• Middle	12:88	20:80	20:80	28:72	20:80
• Worst-off	16:84	24:76	18:82	33:67	23:77
• Overall of three groups	19:81	23:77	24:76	33:67	25:75
• Two villages in the district	21:79		29:71		

Source: Consumption survey

4.4.3 Asset index

The results of wealth ranking and asset information of each household were combined together for computing the asset index. Every household was classified into a wealth group by the FGDs. Asset information of every household was obtained in the village census. The asset index score of each household was calculated according to a total of 17 asset indicators for each household using Principal Component Analysis (PCA). These asset indicators were categorised into four groups as follows;

- Housing material (3 indicators: roof, wall and floor)
- Durable asset ownership (11 indicators: Tak-Tak, motorcycle, bicycle, TV, radio, mobile phone, mill machine, buffalo & cow, pig & goat, poultry and household appliances e.g. pillow, mattress, blanket, pot, spoon, bowl)
- Having adequate own rice production for household consumption throughout the year 2004 (1 indicator, adequate or inadequate)
- Characteristics of family (2 indicators: family size and age of household head)

The mean asset index score of the three wealth groups of households was computed. Within the village, the better-off groups had the highest mean score while the worst-off groups had the lowest mean score (table 4.6). TAL had the lowest mean score compared to the other three villages. The two villages in Phine District (poor district) had lower mean scores than the two villages in APT District (non-poor district).

Table 4.6 Asset index score of three wealth groups in the four villages

	Phine District (Poor district)		APT District (Non-poor district)		Four villages
Mean asset index score	**(1) TAL**	**(2) KY**	**(3) SPX**	**(4) KK**	
• Better off	1.10	1.25	1.14	0.82	1.05
• Middle	-0.22	0.17	0.25	0.03	-0.03
• Worst off	-1.18	-0.84	-0.86	-0.66	-0.91
• All households in the village	-0.32	0.19	0.26	0.10	0.00
• Two villages in the district	-0.14		0.17		

Source: Wealth groups: FGDs and asset index score: village census

More details of the PCA are noted here. The first five most relevant indicators for the asset index score were Tak-Tak, roof material, household appliances, age of household head and wall material (table 4.7). Having adequate own rice production for household consumption was ranked as the sixth significant indicator. The better-off households were likely to have an older household head and family size was larger than in the poorer group. The better-off households had more probability of permanent housing material (i.e. corrugated sheet for roof and wood for wall) and durable asset ownership (e.g. Tak-Tak, radio, TV and bicycle). Few households, even in the better-off group, owned a motorcycle. None of the worst-off owned a mill or a mobile phone. Poultry, pig and goat were the last two relevant asset indicators. They were commonly owned by all three wealth groups, including the worst-off households.

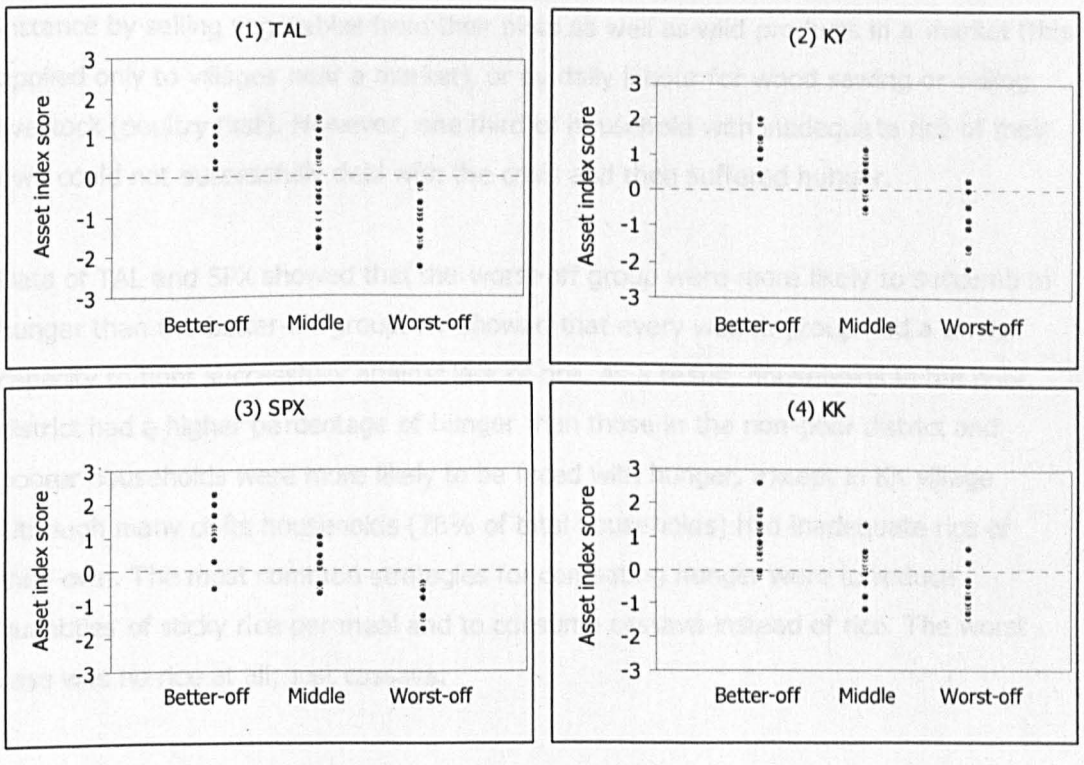
Table 4.7 Factor score of each indicator in the first principal component and proportion of indicator among three groups

			% of household with asset		
	Indicator	**Weight**	**Better-off**	**Middle**	**Worse-off**
1	Tak-Tak	0.71	78%	28%	4%
2	Roof made from permanent material	0.65	96%	73%	35%
3	Appliance in household > 50 items	0.64	96%	65%	41%
4	Age of household head*	0.58	52.24	43.67	37.94
5	Wall made from permanent material	0.58	76%	46%	27%
6	Having enough rice for whole of 2004	0.51	62%	33%	4%
7	Floor made from permanent material	0.47	100%	95%	84%
8	Buffalo and cow	0.47	98%	87%	53%
9	Radio	0.40	71%	53%	41%
10	TV	0.40	42%	15%	8%
11	Motorcycle	0.37	22%	4%	2%
12	Bicycle	0.36	67%	36%	33%
13	Family size*	0.33	7.56	6.81	5.47
14	Mill	0.27	9%	0%	0%
15	Mobile Phone	0.18	7%	3%	0%
16	Poultry	0.13	84%	91%	80%
17	Pig and goat	0.10	78%	83%	65%
	Total number of household		**45 (26%)**	**78 (45%)**	**49 (29%)**

Note * Figures in the row of age of household head and family size are means.

Figure 4.6 plots the asset score of each household by the wealth group they were assigned to. For TAL and KY, all households falling within the better-off group had higher scores than the worst-off group. However, for SPX and KK, some of the less well-off households ranked by assets had a lower score than the better off amongst the worst-off. The asset index scores of the middle group of all four villages had a wide range and overlapped with either the better-off (in case of a high score) or the worst-off group (in case of a low score). This suggests that wealth ranking by FGDs distinguished households at the top from those at the bottom but could not clearly differentiate the middle group from the better-off or the worst-off. Some households in the middle group (especially TAL and KK) had very low scores which were similar to those of the worst-off group.

Figure 4.6 Asset index score and wealth group of each household in the four villages



4.4.4 Food security

The village census showed that all four villages faced food insecurity. Table 4.8 shows that two thirds of all households in the four villages (67%) did not have enough own rice production for household consumption throughout the year 2004 although circumstances were normal. The pattern was clear in all the four villages that the poorer households were more at risk of insufficient own rice production. Even in the better-off group, only 62% had enough own rice production for household consumption. The situation was much worse for the worst-off; only 4% of them had enough of their own rice.

Nonetheless, not all households with inadequate rice of their own experienced hunger. Around two thirds of them could combat the lack of rice. The most common strategies to fight a lack of rice were (1) to borrow rice from neighbours and relatives within or outside the village, and (2) to earn cash for buying rice on a day-to-day basis, for instance by selling vegetables from their plots as well as wild products in a market (this applied only to villages near a market), or by daily labour for wood sawing or selling livestock (poultry first). However, one third of household with inadequate rice of their own could not successfully deal with the crisis and then suffered hunger.

Data of TAL and SPX showed that the worst-off group were more likely to succumb to hunger than the better-off group. KY showed that every wealth group had a similar capacity to fight successfully against lack of rice. As a result, households in the poor district had a higher percentage of hunger than those in the non-poor district and poorer households were more likely to be faced with hunger, except in KK village although many of its households (78% of total households) had inadequate rice of their own. The most common strategies for combating hunger were to reduce quantities of sticky rice per meal and to consume cassava instead of rice. The worst case was no rice at all; just cassava.

Table 4.8 Food insecurity of the four villages in the year 2004

	Phine District (Poor district)		APT District (Non-poor district)		Four villages
	(1) TAL	(2) KY	(3) SPX	(4) KK	
Total household (HH)					
Better-off	7	9	14	15	45
Middle	39	16	11	12	78
Worse-off	16	9	11	13	49
Total	62	34	36	40	172
Not enough own rice (as % of total HH)					
Better-off	14%	67%	14%	53%	38%
Middle	67%	75%	36%	83%	67%
Worse-off	100%	89%	91%	100%	96%
Total	69%	76%	44%	78%	67%
Two villages in the district	72%		62%		
Hunger* (as % of HH not enough own rice)					
Better-off	0%	50%	0%	0%	18%
Middle	38%	50%	25%	0%	33%
Worse-off	75%	50%	50%	0%	45%
Total	51%	50%	38%	0%	35%
Two villages in the district	51%		31%		
Hunger* (as % of total HH)					
Better-off	0%	33%	0%	0%	7%
Middle	26%	38%	9%	0%	22%
Worse-off	75%	44%	45%	0%	43%
Total	35%	38%	17%	0%	24%
Two villages in the district	36%		8%		

Source: Village census plus wealth ranking result from FGDs.
Note: *Hunger means household had at least one day in a month without enough food for normal eating.

4.5 Discussion

4.5.1 Discussion of methodology

At the beginning of the quantitative fieldwork, conducting the village census was not smooth. Age was asked for in the first module of the questionnaire (out of a total of seven modules) in the village census. Asking age was time-consuming and ineffectively prolonged the time needed to complete one questionnaire. The villagers needed to provide as accurate an answer as they could. However, they did not know their age. They had neither birth and death registration nor identity card. Finally, the problem was solved by a rough estimation comparing the individual with other villagers who were of a similar age.

Normally, there is a hierarchical relationship between government staff and villagers, especially in a communist society. This might affect the perception of the villagers towards the village committee members who were appointed by the local governor. It is also common in many developing countries for society to be dominated by men. Against this background, three groups of FGDs (village committee, male and female) were conducted separately in order to avoid domination by some groups. Members of each FGD were mixed from the three wealth groups with different ages from young to elderly. It was of concern that the presence of elderly or wealthier members might inhibit the discussion of younger or poorer members of the group. But it was found that the mixing of members in each FDG did not prevent discussion. The discussion was enjoyable with the different experiences between the elderly and young people. FGD members were not concerned about the mixing of wealth groups.

FGDs were used as a tool for wealth ranking. In every village, three FGDs were separately conducted. From the total of 172 households, the overall result was that;

- 114 households were classified into a wealth group with the consensus of all three FGDs in the village.
- 56 households were classified into a wealth group by a majority of FGDs - 2/3 FGDs had the same opinion. This usually happened in a middle group or a border line group. For example two FGDs ranked a household as middle group while the other FGD ranked it in the better-off or worst-off.

- 2 households were classified into three different groups (better-off, middle, and worst-off) by the three FGDs without an obvious logical reason. These two households were assigned into the middle group.

Cross-checking between the results of wealth ranking and some main asset indicators (e.g. housing material, having enough own rice production, cow and buffalo) from the village census was done during fieldwork in order to roughly validate the wealth groups before applying them in the consumption survey. This did not indicate any obvious contradictions. The decision to select a wealth group based on majority FGD decision (2/3 FGDs had the same opinion) was confirmed. For example, one household was ranked into the worst-off group by two FGDs but in the better-off group by the female FGD. Asset indicators from the village census showed that this household was relatively poor. Some members of the female FGD explained that the father of this household was a founder of the village. Out of respect for the householder, the women had ranked this household as better-off.

Wealth ranking by FGDs was able to distinguish the relative poverty of households. It was simple, did not require technical expertise about poverty, was not time-consuming and provided low-cost tools for making poverty comparisons between households. Importantly, it encouraged community participation. In contrast, measuring poverty using household consumption, an asset index or a hunger indicator was more complicated, time-consuming and expensive and required a technically skilled person to conduct the study.

Results from the PCA showed that the asset index score obtained from the village census was reasonably well correlated with the results of wealth ranking by FGDs. The top and bottom groups of households could be differentiated by the FGDs. However, the FGDs could not clearly differentiate the middle group from the worst-off group. The results of wealth ranking by FGDs to identify the poorest households must be treated with caution given the apparent problem of under-estimation (ie some households classed as poor by the asset index were ranked in the middle group by FGDs.).

It was surprising that villagers could fairly well answer questions in the consumption survey (i.e. estimate the value of food consumption and expenditure on non-food consumption), although they lived in a subsistence economy. Most respondents easily

converted the value of a meal they consumed into money by comparing with a price at the nearest market. They provided expenditures on non-food consumption without difficulty e.g. stationary for children to go to school, clothes and shoes. They firstly answered quantity they consumed and then its price. The researcher calculated a total amount and reported back to them item by item including a total amount of consumption at the end of the interview. For example, their answers were five pairs of shoes last year, three were 5,000 kip each and the other two were 10,000 kip each. Normally, a household head and a housewife were key respondents. It was found in one household that a housewife never went to a market and she did not know any prices of food. In this case, the housewife gave answers on quantity and a household head estimated the price of each item.

Applying various methods of both qualitative and qualitative approaches enabled the cross-checking of information for validity and reliability. For example, in the first village, a household was ranked as better-off by all three FGDs, but the village census showed that the household lacked own rice products and faced hunger. The information was inconsistent between the village census and the FGDs. After consulting the village head, it was established that the household head had under-reported. It was explained that it might be because the household head had been given rice assistance many years ago (approximately in 1997) and was hoping for assistance again in the future. Information from all households in the first village related to having enough own rice products over 2004 was then re-checked with the village head and the deputy village head. There were three possible answers: (1) enough for household consumption plus trading, (2) enough for household consumption and (3) not enough. The issue was then informally discussed with the other three village heads before conducting the village census. Every household was reassured that this study was not related to any assistance from domestic or international agencies. In the first village, the explanation had clarified only that the study was not linked to any tax system of the government. The re-checking of data between wealth ranking from FGDs and having rice from the village census was applied to all villages.

Regarding the asset module in the village census, villagers' answers about number of assets owned by households were less problematic than those related to food security indicators. Assets were visible and could be observed whereas having sufficient rice of

their own and hunger were subjective and could not be observed during the interview period.

4.5.2 Overview of findings

This chapter has provided information on characteristics of the four villages including a poverty assessment using quantitative and qualitative methods. The results highlighted that all the four villages were poor which was unsurprising. The villagers had difficult living conditions - about 24% of all households in the villages experienced hunger during 2004. The mean consumption of the four villages was less than 1 USD per person per day. The villagers lived at subsistence level, making them highly vulnerable. All villagers' livelihood was based on agriculture and the rearing of livestock without high technology support. The four villages still had a primitive infrastructure; had no road and public transportation reaching the villages, no electricity and extremely limited telecommunications. Basic sanitation was still a fundamental problem; there was an inadequate water supply and no potable drinking water, no private toilet in houses or even a public toilet in the villages (except KK village) and poor hygiene in relation to eating habits. Local health facilities located in the community were perceived to be the most accessible treatment option for the villagers. Maternal health services in the four villages were not performing well.

Comparing among the four villages, they had similar poor public sanitation but some differences were found (Table 4.9). TAL village had the most difficulty in accessing private and public health providers. Access was comparatively easy in both KY and SPX but easiest in KY. Indicators on consumption and hunger of TAL and KY were worse than SPX and KK. TAL had the lowest asset index score compared to other three villages. Comparing by district, the two villages in the poor district showed worse figures for mean household consumption, asset index and hunger than the non-poor district.

It can be concluded that Phine district (the poor district) was poorer than APT district (the non-poor district). TAL was the most disadvantaged village. Both SPX and KY were moderately advantaged villages, while KK was the most advantaged village.

Table 4.9 Summary indicators of the four villages

	Phine District (Poor district)		APT District (Non-poor district)	
	(1) TAL	(2) KY	(3) SPX	(4) KK
Ethnicity	*Lao Theung*	*Lao Theung*	*Lao Lum*	*Lao Lum*
Public sanitation e.g. water, toilet	Deprived	Deprived	Deprived	Deprived
Access to public health facilities	The most difficulty	Easy	Easy	Easiest
Household consumption (USD per person per day)				
• Data by village	0.69	0.51	0.72	1.29
• Data by district	0.61		1.00	
Asset index score				
• Data by village	-0.32	0.19	0.26	0.10
• Data by district	-0.14		0.17	
Food security: hunger (% of total households)				
• Data by village	35%	38%	17%	0%
• Data by district	36%		8%	

From a total of 172 households of the four villages, about 28% of them were identified by FGD as the worst-off, 45% were in the middle group and 26% were in the better-off group. Main criteria from FGDs to identify the worst-off were mainly related to routine life e.g. inadequate own production of rice for the whole year's household consumption, poor shelter, few livestock and few utensils. Household consumption data and asset index score showed that the worst-off group had the worst figures whereas the better-off group had the best figures. Regarding food security, it was clear in TAL, KY and SPX that the worst-off households had higher possibility to fall into hunger whereas the better-off had the least possibility. However, no KK villagers had faced hunger.

4.5.3 Discussion of findings

Comparing characteristics of the four villages to national data

Data of the four villages was compared to national data from the Lao Expenditure and Consumption Survey III (LECS III) in 2003 (Lao PDR 2004) which classified data into three groups; urban, rural areas with access to road and rural areas without access to road. Most indicators from the four villages were comparable to the data of 'rural areas without access to road' from the LECS III (table 4.10). The sampled villagers had similar main economic activities to the rural areas without access to road – 83% of working time was spent on their own farm. In terms of infrastructure, all four villages had no electricity and no toilet which made them more disadvantaged compared to the 'rural areas without access to road'. The four sampled villages had slightly higher percentage of food consumption (75%) out of total consumption than those in the rural areas without access to road. For education indicators, the sampled four villages had relatively poorer adult literacy rate but slightly better school enrolment than those in the rural areas without access to road.

Table 4.10 Indicators of the four villages compared to the rural areas without access to road from the LECS III

Indicator	Data of rural areas without access to road from LEC III	Mean figures of the four villages
• Household size (people per household)	6.6	6.6
• Dependency ratio (per 100)	90*	98
• % of working time spent on their own farm	83%	Nearly 100%
• Food consumption as % of total household consumptions	71.4	75%
• % of population without toilet	83%	Nearly 100%
• % of villages without electricity	87%	100%
• % of villages with bus stop in village	11%	0%
• Adult literacy rate, who can read and write (% of adult greater than 15 years)	54%	32%
• School enrolment (% of children 6-10 years)	53%	57%

Note: * Data of rural areas without access to road was not available and this figure referred to all rural areas

It can be concluded that the characteristics of the four villages and the villagers were similar to other rural areas without access to road of Lao PDR but their public facilities were more deficient. The LECS III showed that the rural areas without access to road were the worst-off area, followed by the rural areas with access to road and the urban areas were the best. Throughout the country, about 28% of total households lived in urban areas, 54% in rural areas with access to road and 18% in rural areas without access to road.

Poverty assessment

From the villagers' perspective, the most important criteria for wealth were the essentials of daily life: i.e. rice availability, dwelling, livestock for rice cultivation and valuable assets and clothes and house equipment. These were very different from those in two previous reports. One was the study by Paphassarang et al. (2002) which classified the socioeconomic position of urban households by five physical conditions: permanent house structure, flushing toilet inside the house, gas or electricity used for cooking, television and private car. The criteria from this study were not appropriate to the rural setting of this thesis. The other was the National Growth and Poverty Eradication Strategy, NGPES, (Lao PDR 2004) which defined a poor household as having an income level (or the equivalent in kind) of less than 85,000 kip or 8.5 USD (10 USD for urban and 8.2 USD for rural) per person per month at 2001 prices. This amount was sufficient for purchasing milled rice of 16 kilograms per person per month but the rest was insufficient to cover other necessities e.g. clothing, shelter, schooling and medical costs. The criteria from the NGPES were not applicable to this thesis because the four sampled villages were in the subsistence economy. An approach of quantifying household income was not practical.

Comparing the two approaches of poverty assessment, asset indicators by PCA and the wealth criteria by FGDs, similarity and difference were found. Housing material, livestock, clothes and housing appliances were important indicators of poverty in both approaches. The PCA suggested that buffalo and cow ownership was more significant than ownership of poultry and pigs since all of three wealth groups commonly owned poultry and pigs. Normally, these were mainly for trading, ritual sacrificing and taking care of their guests, not for food for the household.

From the PCA, age of household head was one of the top five significant indicators. The better-off households were likely to have an older household head and family size was larger than in the worse-off group. These were not significant criteria from the FGDs' view point. Nonetheless, all the female FGDs agreed that a new family tended to be poorer than a mature family. A new household set up by a new couple would be in the worst-off group because they had just detached themselves from their parents. Later, some of them could shift to a better-off status but some could not and remained in the worst-off group. This depended very much on hard-work and luck, where luck referred to the quality of their rice field(s) in terms of producing more rice products.

Tak-Tak was the most significant asset indicator in the PCA but the FGDs did not mention Tak-Tak ownership as an important criterion to distinguish a wealth group. The FGDs gave an example of a household that became poorer due to purchasing a Tak-Tak. The household had traded their buffalos and cows for a Tak-Tak and thereafter did not have enough cash to buy gasoline to operate it and/or could not afford the cost of its maintenance. This household had lost their livestock and gained a useless machine. Moreover, selling a second hand Tak-Tak would get them an unacceptably low price.

From PCA, having adequate rice production for household consumption was ranked as the sixth significant indicator whereas FGDs revealed that it was the most significant indicator. This was understandable as it implied multiple factors, for example having a water buffalo or a Tak-Tak for rice cultivation, sufficient labour (either own labour or hired from a neighbour), or having resources to invest in a paddy field (e.g. buying fertilizer).

Combating food insecurity

The findings of this chapter show that about two thirds of households with insufficient rice of their own could cope with the lack of rice but one third could not and then suffered hunger. No household in KK faced hunger, although many households lacked rice. One possible reason was that the village was close to a market and the villagers could easily reach the market. They could sell natural products they fetched from the forest and buy a minimal amount of rice for day to day consumption. The villagers said that by doing this, housewives were able to limit the amount of rice consumed per day

and family members would accept it without difficulty. Access to road (and market) was significant for the villagers to fight a crisis of lack of rice and hunger. In order to fight with insufficient rice of their own, coping strategies using both intra-household and inter-household mechanisms were mentioned e.g. borrowing rice, sell poultry and income diversification were commonly used by households.

4.6 Concluding remarks

This chapter has showed that the villagers were poor which was unsurprising for a LDC. Compared to the national survey, the four villages had similar conditions to the rural areas without access to road (the most disadvantaged area) of the Lao PDR, for instance agricultural activity on own operated rice farm and poor infrastructure. The sampled villages and households were typically rural in the Lao context with very poor access to public services.

In general, the villagers had difficult living conditions e.g. inadequate water, unsafe potable water, inconvenient transportation, insufficient opportunity to access information, and poor sanitation. Between the villages, geography appeared to be the main determinant affecting the activity of villagers, especially when they had to deal with difficulty in their life. It was clear that the closer to the main road and market a village was, the more scope it had to solve a problem e.g. earning income, combating hunger, and accessing health facility when ill. Within the village, the poorer households were more vulnerable than the better-off in terms of food insecurity and precarious shelter. In addition, they owned fewer livestock which roughly reflected their fewer resources.

Regarding poverty assessment, wealth ranking by FGDs successfully differentiated the relative poverty of households. Comparison of the asset index with wealth ranking by FGDs suggested that wealth ranking can be used to identify in general terms the worst-off households in a village. The consumption survey was used to quantify the mean household consumption of each wealth group in the villages. This enabled monthly household consumption of each household to be calculated and used for calculating illness cost burden on the household and identifying catastrophic health expenditure, as shown in chapter 6.

CHAPTER 5
HEALTH SERVICE UTILIZATION

5.1 Introduction

This chapter analyses the data of households in the four villages in order to assess health service utilization patterns and illness costs and respond to objective 2 of the study. This analysis provides the context for better understanding of demand-side reactions to illness and access and use of health services. A brief methodology is presented in the next section followed by the results of the study. A summary and discussion of the findings are presented subsequently, at the end of the chapter.

5.2 Methodology

Data used in this chapter were obtained from the sampled households using the village census, key informant interviews and focus group discussions. These studies were conducted in the four villages during December 2005 – April 2006; December 2005 for TAL village, February 2006 for KY, March 2006 for SPX, and April 2006 for KK. The researcher and RA stayed in each village for 10-18 days (18 days for TAL and 10 days for each of the other three villages) and completed the fieldwork in one village before moving to the next.

In each village, the questionnaire for the village census was applied to all households in the village (a total of 172 households with 1,139 individuals in the four villages). The interview using semi-structured guidelines was applied to key informants who were village committee members. Three focus group discussions were conducted for three different FGD members; village committees, males and females.

Analysis of quantitative data was done using SPSS® and is presented using descriptive statistics. Analysis of qualitative data was manually done using a thematic content approach and is presented in descriptive narrative.

5.3 Illness and health service utilization

All villagers in each village were asked whether they had been ill in the previous 2 weeks and had subsequently accessed and used services for OP treatment and had been admitted to health providers in the previous 12 months. The number of households and individuals reporting illness, use of OP treatment and admission in the four villages are set out in table 5.1.

Table 5.1 Individuals reporting illness, service use for OP treatment and admission

	Phine District (Poor district)		APT District (Non-poor district)		Four villages
	(1) TAL	(2) KY	(3) SPX	(4) KK	
Total households	62	34	36	40	172
Total villagers	455	248	233	203	1139
Illness in the previous 2 weeks					
• Number of illness episodes	52	25	10	16	103
o Episodes without seeking care	31	5	3	1	40
o Episodes with seeking care	21	20	7	15	63
• Reported illness rate (as % of total villagers)	11%	10%	4%	8%	9%
o Episodes where care not sought (as % of total villagers)	7%	2%	1%	0.5%	4%
o OP service utilization (as % of total villagers)	5%	8%	3%	7%	6%
Admission in the previous 12 months					
• Number of people admitted	2	7	16	13	38
• Admission rate (as % of total villagers)	0.44%	2.82%	6.87%	6.40%	3.34%
• Mean length of stay (days/person admitted)	9.5	1.3	1.4	4.0	2.7
• Reported cause of admission	Ruptured appendix (1), Malaria (1)	Delivery (4) Pneumonia (1), Abscess (1), Malaria (1)	Diarrhea (7), Abdominal pain (4), Fever (2), Malaria (2), Accident (1)	Diarrhea (4), Fever (2), Hemorrhagic fever (2), Jaundice (1), Malaria (1), Abdominal pain (1), Explosion accident (1), Fatigue (1)	

Source: Village census

A total of 92 households (out of 172 households) reported illness in the previous 2 weeks or admission in the previous 12 months or a combination of illness and admission. A majority of households experienced one episode of either illness or admission. Some households faced 2 or 3 illness episodes in the previous 2 weeks. A minority of households suffered from multiple illness and admissions in a year. There were 103 self-reported illness episodes in the two weeks prior to the village census; subsequently only 63 illness episodes received OP services and 38 people were admitted to health facilities in the previous twelve months.

Individuals in TAL and KY reported more perceived illness (11% and 10% of total villagers in the village, respectively) than SPX and KK villagers (4% and 8% respectively). 'No treatment' was the most commonly reported first action (40/103 illness episodes). Individuals in TAL (the most disadvantaged village) were least likely to access OP services when ill (7% of total villagers in the village did not seek care), an indicator of inaccessibility to health services; both KY and SPX villagers (the moderately advantaged villages) showed figures lower than TAL (1-2%); in contrast individuals in KK (the most advantaged village) showed the lowest (0.5%).

TAL villagers reported the lowest admission rate (0.44%) in the previous 12 months compared to higher admission rates in SPX and KK (6.87% and 7.39%). Mean length of stay and reported cause of admission were useful in exploring these differences. Mean length of stay (LOS) of TAL villagers' admission was 9.5 days while mean LOS of the other three villages was shorter at 1.3, 1.4 and 4.0 days for KY, SPX and KK village respectively. Although the other three villages had higher reported admissions than TAL, it should be noted that causes of admission in TAL were ruptured appendicitis and malaria, while there were 4 deliveries out of a total of 7 admissions for KY, 7 diarrhoea cases out of a total of 16 admissions in SPX and 4 diarrhoea cases out of a total of 13 admissions in KK. It can be interpreted that the two admissions of TAL were more serious than those for the other three villages.

Data were analysed by wealth group and are shown in table 5.2. For all four villages, the better-off reported a lower level of illness (6%) than the worst-off (11%). All wealth groups had a similar utilization rate of OP treatment (about 5-6%). The better-off reported more admissions (8%) than the worst-off (1%). Due to small sample sizes

in each village, it was difficult to compare data among the three wealth groups in the village

Comparing districts (table 5.2), the two villages in the poor district had a higher illness rate than the non-poor district but the utilization rates of these two districts were similar. The poor district showed a lower admission rate than the non-poor district.

Table 5.2 Reported illness, use of OP treatment and admission by wealth group

	Phine District (Poor district)		APT District (Non-poor district)		Four villages
	(1) TAL	(2) KY	(3) SPX	(4) KK	
Number of villagers					
• Better-off	61	78	109	92	340
• Middle	292	114	70	55	531
• Worst-off	102	56	54	56	268
• All groups in village	455	248	233	203	1139
• Two villages in the district	703		436		
Reported illness (episodes)					
• Better-off	2	10	4	6	22
• Middle	29	12	4	6	51
• Worst-off	21	3	2	4	30
• All groups in village	52	25	10	16	103
• Two villages in the district	77		26		
Access and use of OP treatment (episodes)					
• Better-off	0	9	2	6	17
• Middle	14	9	3	5	31
• Worst-off	7	2	2	4	15
• All groups in village	21	20	7	15	63
• Two villages in the district	41		22		
Access and use of hospitalization (person admitted)					
• Better-off	0	3	13	10	26
• Middle	1	3	3	3	10
• Worst-off	1	1	0	0	2
• All groups in village	2	7	16	13	38
• Two villages in the district	9		29		
Reported illness (as % of villagers in each category)					
• Better-off	3%	13%	4%	7%	6%
• Middle	10%	11%	6%	11%	10%
• Worst-off	21%	5%	4%	7%	11%
• All groups in village	11%	10%	4%	8%	9%
• Two villages in the district	11%		6%		
Access and use of OP treatment (as % of villagers in each category)					
• Better-off	0%	12%	2%	7%	5%
• Middle	5%	8%	4%	9%	6%
• Worst-off	7%	4%	4%	7%	6%
• All groups in village	5%	8%	3%	7%	6%
• Two villages in the district	6%		5%		
Access and use of hospitalization (as % of villagers in each category)					
• Better-off	0.0%	4%	12%	11%	8%
• Middle	0.3%	3%	4%	5%	2%
• Worst-off	1.0%	2%	0%	0%	1%
• All groups in village	0.4%	3%	7%	6%	3%
• Two villages in the district	1%		7%		

Source: Village census

5.4 Treatment seeking patterns

5.4.1 Treatment seeking pattern for illness in the previous two weeks

Table 5.3 shows the proportion seeking different types of health care of villagers who reported illness within the previous 2 weeks. Those who sought care chose herbal medicines and private practitioners. Herbs are naturally available in the community. A private practitioner frequently came to the village. Neither the private clinic nor the public health care providers were the choice of treatment for TAL villagers because the village was very far from health care providers and it was difficult to travel. Only one household used analgesic drugs which had been bought from a private drug store in a market and were kept in the house.

The most popular choice of KY villagers was a private practitioner (26% of total OP contacts) who was an ex-head of the nearest health centre. KY villagers remained confident in him and continued seeking care from him at his home near the health centre at any time. Several choices of treatment were available around KY village and the villagers also obtained health services from them. Only one individual in all four villages that lived in KY sought OP treatment from a district hospital.

The most preferred choice of SPX village was a VHV (37% of total OP contacts) even though data from key informant interviews and observation showed that only 4 drug items were available from the original list of 27 drug items. SPX villagers had a good impression of the VHV.

> *"It is no problem to find him. We can reach him easily. He is friendly and never complains when he has to walk back to his home in order to get drugs for us. Moreover, we can buy with a little amount. Sometimes, we get drugs first and pay him later."*
>
> (FGD of females, SPX village)

The KK villagers preferred the private drug stores (41% of total OP contacts) in the market. The village was very near the market and the housewives regularly went to the market by 20 minutes walking. It was interesting to see the high proportion of

Seang-Pao (32%) in KK. This was because a famous village healer lived in the village. Not only KK villagers but also members of other villages, other districts and other provinces often came to seek care from him. KK village was in the catchment area of the district hospital, so data on the health centre in table 5.3 is shown as NA (not available).

It should be mentioned that a VHV as well as a village Revolving Drug Fund (RDF) were available in all four villages. But the VHV was functioning well in only one village, SPX. One case of use in KY occurred because the VHV provided drugs from the RDF to his family. The VHV was never used by TAL and KK villagers. Findings from key informant interviews of TAL, KY and KK villages showed that the villagers claimed that it was not convenient to find the VHV. The VHV said that he had other important responsibilities e.g. earning for his own family (TAL) or being the village head (KK) or the vice village head (KY). Another reason from KK was that the village was very near the market so the villagers could easily reach many drug stores with a variety of drugs.

Table 5.3 Treatment seeking pattern for illness in the previous two weeks

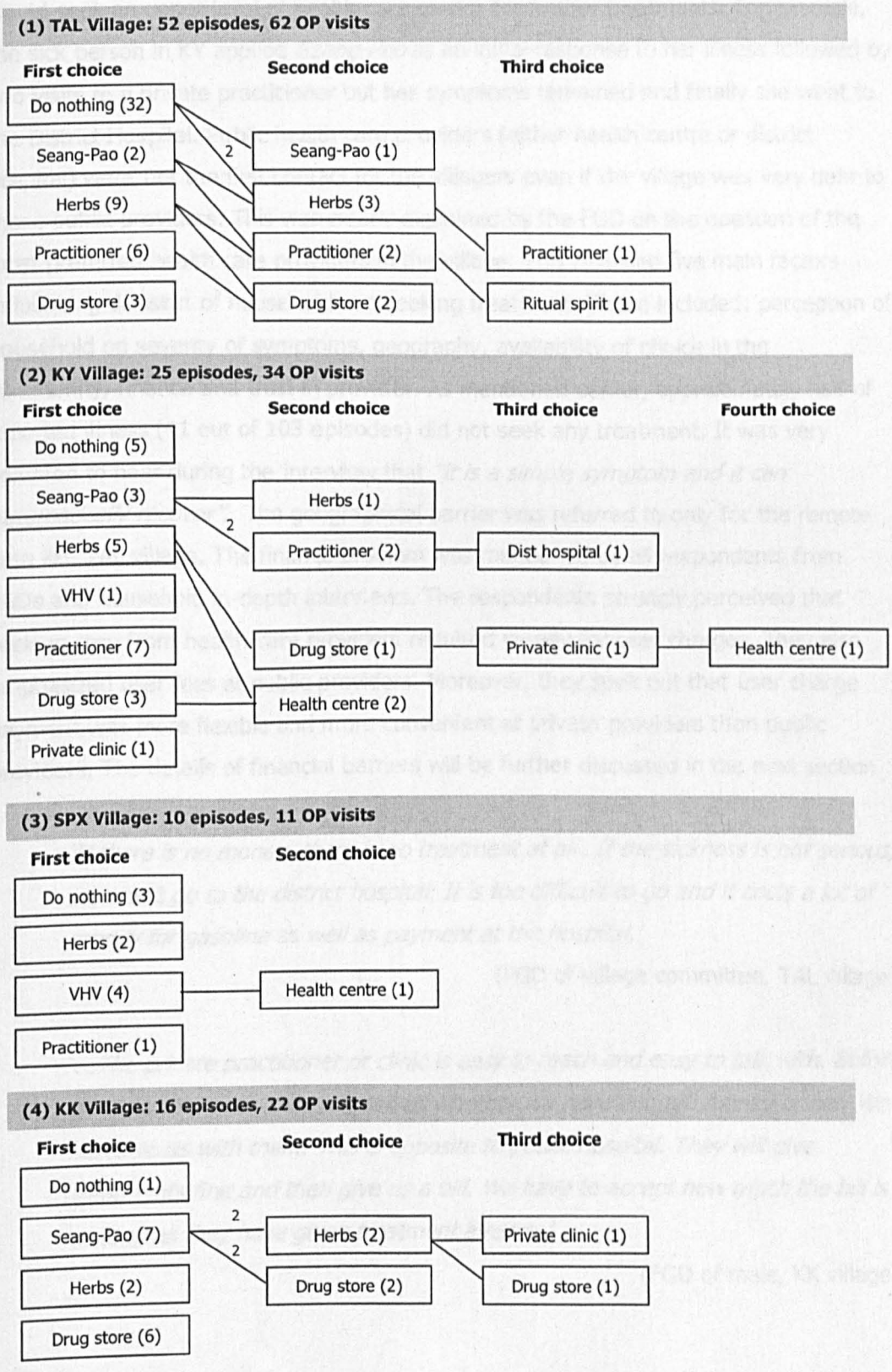
	Phine District (Poor district)		APT District (Non-poor district)		Four villages
Types of provider	**(1) TAL**	**(2) KY**	**(3) SPX**	**(4) KK**	
No treatment	**52%**	15%	27%	5%	**32%**
A) Local facilities	26%	30%	54%	50%	34%
A1. Herb	19%	18%	18%	18%	19%
A2. *Seang-Pao*	5%	9%	0%	32%	10%
A3. VHV	0%	3%	**36%**	0%	4%
A4. Traditional ceremony (*Heet*)	2%	0%	0%	0%	1%
B) Private providers	23%	44%	9%	46%	31%
B1. Private practitioner	15%	**26%**	9%	0%	15%
B2. Drug Store	8%	12%	0%	**41%**	14%
B3. Private clinic	0%	6%	0%	5%	2%
C) Public providers	0%	12%	9%	0%	4%
C1. Health Centre	0%	9%	9%	NA*	3%
C2. District Hospital	0%	3%	0%	0%	1%
Total	100%	100%	100%	100%	100%
Total OP visits	62	34	11	22	129
Total episodes	52	25	10	16	103
Mean visits per episode	1.2	1.4	1.1	1.4	1.3

Source: Village census
Note: Bold figure shows the highest proportion in the village. NA* means there was no health centre for KK villagers.

The health care seeking pattern shown in table 5.3 clearly highlights the frequency of each provider but it does not provide details of the sequencing for one illness episode. The diagram in figure 5.1 has therefore been drawn in order to illustrate the process of health care sought for every episode.

Most of the illness episodes had one contact with one health provider, especially in SPX village. A minority of illness episodes had more than one contact with a health service (8 out of 52 episodes in TAL, 6 out of 25 episodes in KY, 1 out of 10 episodes in SPX and 4 out of 16 episodes in KK). A case in KY had the maximum number of four contacts per episode.

Figure 5.1 Outpatient treatment seeking patterns of villagers who reported illness in the previous two weeks



Source: Village census
Note: Each line indicates one case sought further health service otherwise number of cases indicated above line.

Typically, the first treatment obtained was from local facilities (herbs, *Seang-Pao* and VHV) or private providers (private practitioner, drug store or private clinic) and the sick would seek an upper level of health care service for further treatments. For example, the sick person in KY applied *Seang-Pao* as an initial response to her illness followed by two visits to a private practitioner but her symptoms remained and finally she went to the District Hospital. Public health care providers (either health centre or district hospital) were not the first contact for the villagers even if the village was very near to these public providers. This was clearly explained by the FGD on the question of the most preferred health care providers in the village. This revealed five main factors influencing decision of households on seeking treatment. These included: perception of household on severity of symptoms, geography, availability of choice in the community, finance and trust in provider. As mentioned earlier, approximately half of reported illness (41 out of 103 episodes) did not seek any treatment. It was very common to hear during the interview that *"it is a simple symptom and it can automatically recover"*. The geographical barrier was referred to only for the remote area like TAL village. The finance problem was mentioned by all respondents from FGDs and household in-depth interviews. The respondents strongly perceived that seeking care from health care providers required money for user charges. They also emphasized user fees at public providers. Moreover, they spelt out that user charge payment was more flexible and more convenient at private providers than public providers. The details of financial barriers will be further discussed in the next section.

> *'If there is no money, there is no treatment at all...If the sickness is not serious, we won't go to the district hospital. It is too difficult to go and it costs a lot of money for gasoline as well as payment at the hospital.'*
>
> (FGD of village committee, TAL village)

> *'...The private practitioner or clinic is easy to reach and easy to talk with. Before giving treatments, they will ask us whether we have enough money or not. We can discuss with them. This is opposite to public hospital. They will give treatments first and then give us a bill. We have to accept how much the bill is as long as they have given treatment already.'*
>
> (FGD of male, KK village)

Trust in providers was mentioned by some respondents, for example, the case of the ex-head of a health centre at KY village as mentioned above.

> *'Very few villagers seek care from the district hospital. Pao is the first choice for us. And then most of us go to see the doctor who previously worked in the nearest health centre for a long time. He just retired in the last year (2004). But we still can see him at his home at any time. He is really good for us. He does not prefer to have further practice; he needs to rest but we really request him to treat us. If some disease can not be cured by him, he will tell us to go to the hospital.'*
>
> (FGD of female, KY village)

5.4.2 Treatment seeking pattern related to person admitted in the previous twelve months

The villagers who had experience of admission in the previous 12 months were asked about all health facilities where they sought care from the beginning of the illness up to and including admission. Someone admitted in a health facility might seek treatment locally as an OP condition before admission in a hospital. Therefore, health service utilization for one person admitted can combine both OP treatments before the admission and hospitalization. A patient who was admitted and received OP treatments in the last 2 weeks was counted as 'person admitted in the last 12 months'. The data on OP visits in relation to persons admitted does not therefore duplicate the data on OP visits in the previous section.

Table 5.4 shows the proportion of different types of health care sought by the villagers who reported an admission in the previous twelve months. The district hospitals were the most frequently contacted for admission, at 28% of all contacts in the four villages. TAL had only two admissions. The highest proportion of contacts in TAL was the district hospital because the two cases sought treatment from district hospital for three actions. The highest proportion of contacts in the KY villagers was a traditional ceremony (29%) which was an event of greeting (called *Puk Khan*) after a mother and a new born had been discharged from the providers. In addition, the KY villagers had a preference for seeking care from the private practitioner and the district hospital (24% each). The SPX villagers mostly preferred to go to the health centre for admission as well as buying drugs from the VHV before admission. The KK villagers did not seek treatment from local facilities for admission but they sought treatment from public (81%) and private providers (19%).

Conditions needing admission involved more encounters than OP treatments without admission. The mean of 2.2 encounters per person admitted of the four villages (table 5.4) was greater than the mean of 1.3 OP visits per episode (table 5.3). Comparing across the four villages, the two villages in the poor district had a greater mean number of encounters per person admitted than those in the non-poor district.

Table 5.4 Treatment seeking pattern related to the last admission in the previous twelve months

	Phine District (Poor district)		APT District (Non-poor district)		Four
Types of provider	**(1) TAL**	**(2) KY**	**(3) SPX**	**(4) KK**	**villages**
A) Local facilities	54%	34%	38%	0%	32%
A1. Herbs	18%	0%	6%	0%	5%
A2. *Seang-Pao*	18%	5%	3%	0%	5%
A3. VHV	9%	0%	26%	0%	12%
A4. Traditional ceremony	9%	**29%**	3%	0%	10%
B) Private providers	9%	29%	6%	19%	15%
B1. Private practitioner	9%	24%	3%	0%	9%
B2. Drug store	0%	0%	0%	6%	1%
B3. Private clinic	0%	5%	3%	13%	5%
C) Public providers	36%	39%	56%	81%	54%
C1. Health centre	0%	10%	**41%**	NA*	20%
C2. District hospital	**27%**	24%	9%	**75%**	**28%**
C3. Provincial hospital	9%	5%	6%	6%	6%
Total	100%	100%	100%	100%	100%
Total encounters (n)	11	21	34	16	82
Total persons admitted (n)	2	7	16	13	38
Mean encounters per person admitted	5.5	3.0	2.1	1.2	2.2

Source: Village census

Note: Bold figure shows the highest proportion in the village. NA* means there was no health centre for KK villagers.

The diagram of admissions in figure 5.2 clearly shows that, compared to other villages, KK villagers had the shortest pathway to reach admission at the district hospital or the provincial hospital. TAL village showed the highest mean of 5.5 encounters per person admitted; 7 encounters for the ruptured appendicitis case and 4 encounters for the malaria case. KY and SPX village had a mean of 3 and 2.1 encounters per person admitted, respectively. Nevertheless, one case in SPX, injuries on a patient's left leg by falling from a bicycle, had the maximum of 7 encounters by the end of interview period. The patient might continue to seek further treatment from several choices around him if his symptoms did not get better.

Interestingly, the majority of the 18 people admitted (15/18) who started treatment with public providers used only one treatment source. In contrast, all of the 20 people admitted starting with local or private providers went on to seek care from other sources.

As might be expected, when the patient obtained care from many encounters, they would firstly seek care from the simplest choice and then seek further care from an upper level provider. For example, one case sought initial care from herbal medicines, followed by buying drugs from the VHV; continued seeking care from the health centre and finally ended up at the district hospital. However, two cases in KY showed different patterns. One case, a better-off household, initially chose the district hospital, only one contact for admission, to cure a housewife's abdominal pain. It was because at that time they lived in their farmhouse which was on the main road and the district hospital was the most accessible for them. Another case, a better-off household, tried three ways of treating the abdominal pain of their 9 year old daughter. The first choice was *Seang-Pao* followed by the health centre and finally the provincial hospital. The parents decided to take the girl to the provincial hospital, not the district hospital, because the health centre suggested it. They accepted that suggestion and they could afford transportation costs, treatment costs and living costs.

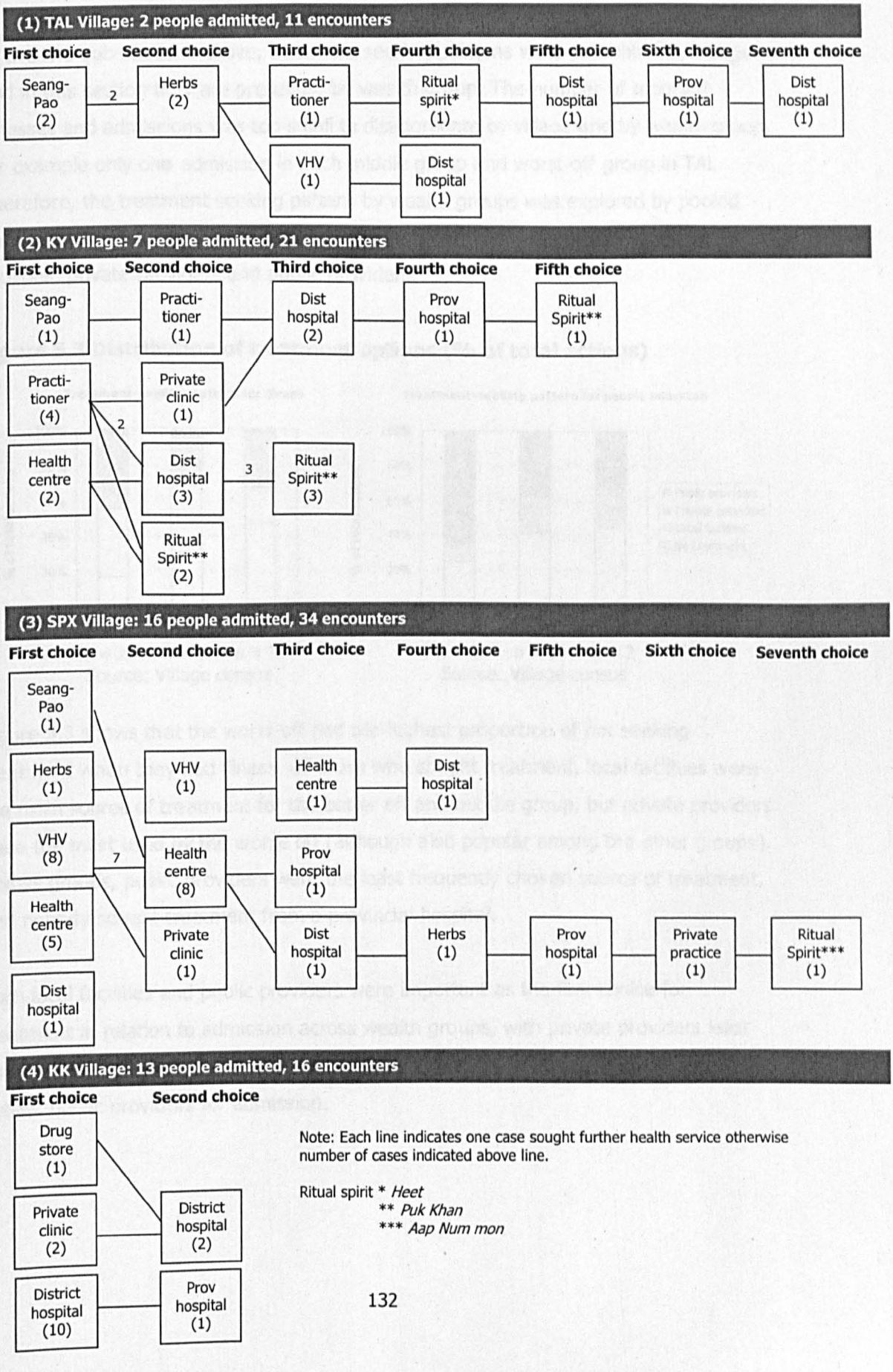
The provincial hospital was never the first choice for admission (figure 5.2) and this was clarified by FGDs. Only serious cases would reach the provincial hospital. Furthermore, FDG of males in KK revealed their opinion that they totally relied on themselves as to whether they would seek care from the provincial hospital or not, even if the district hospital suggested referring the patient to the provincial hospital. This was because the household shouldered all the expenditures including the transportation cost of the referral.

> *'Although the district hospital referred the patient to the provincial hospital, we had to consider our financial ability. Sometimes we did not go to the provincial hospital but we sought care from other sources instead. Perhaps, the patient might get better and we could avoid expensive treatment at the provincial hospital.'*
>
> (FDG of male, KK village)

In the context of Lao, ritual spirit could represent different steps of the treatment process. It might be at the beginning or the first choice like *Seang-Pao*. It might be in the middle of the process of all treatments such as *Heet*, a ritual offering to the spirit, (admission of TAL village, figure 5.2), or it might be at the end of the treatment

process such as *Puk Khan*, a greeting for a newborn or a welcoming the patient back home (admission of KY village, figure 5.2).

Figure 5.2 Treatment seeking patterns of admissions in the previous twelve months



Note: Each line indicates one case sought further health service otherwise number of cases indicated above line.

Ritual spirit * *Heet*
** *Puk Khan*
*** *Aap Num mon*

5.4.3 Treatment seeking pattern by wealth groups

In the two sub-sections above, treatment seeking patterns were presented by village and in this section they are presented by wealth group. The number of reported illnesses and admissions was too small to disaggregate by village and by wealth group, for example only one admission in each middle group and worst-off group in TAL. Therefore, the treatment seeking pattern by wealth groups was explored by pooled data of all four villages. Types of providers are shown by three categories; local facilities, private providers and public providers.

Figure 5.3 Distribution of treatment options (% of total actions)

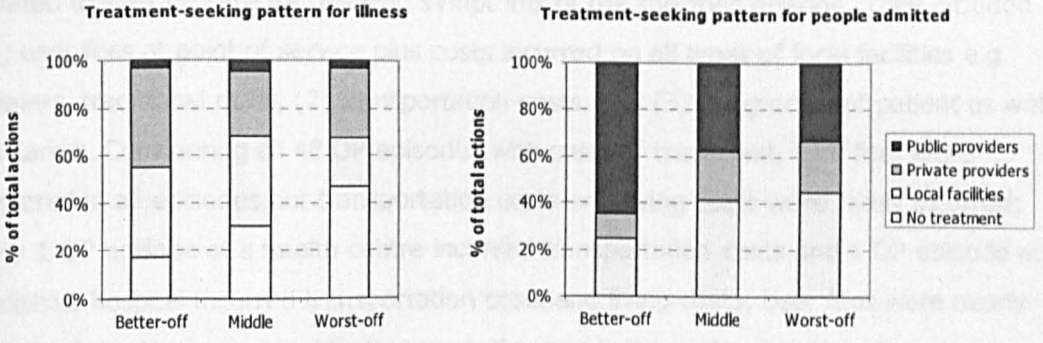


Figure 5.3 shows that the worst-off had the highest proportion of not seeking treatment when they had illness. Of those who sought treatment, local facilities were the main source of treatment for the better off and middle group, but private providers were the most used by the worse off (although also popular among the other groups). Across groups, public providers were the least frequently chosen source of treatment, and nobody sought treatment from a provincial hospital.

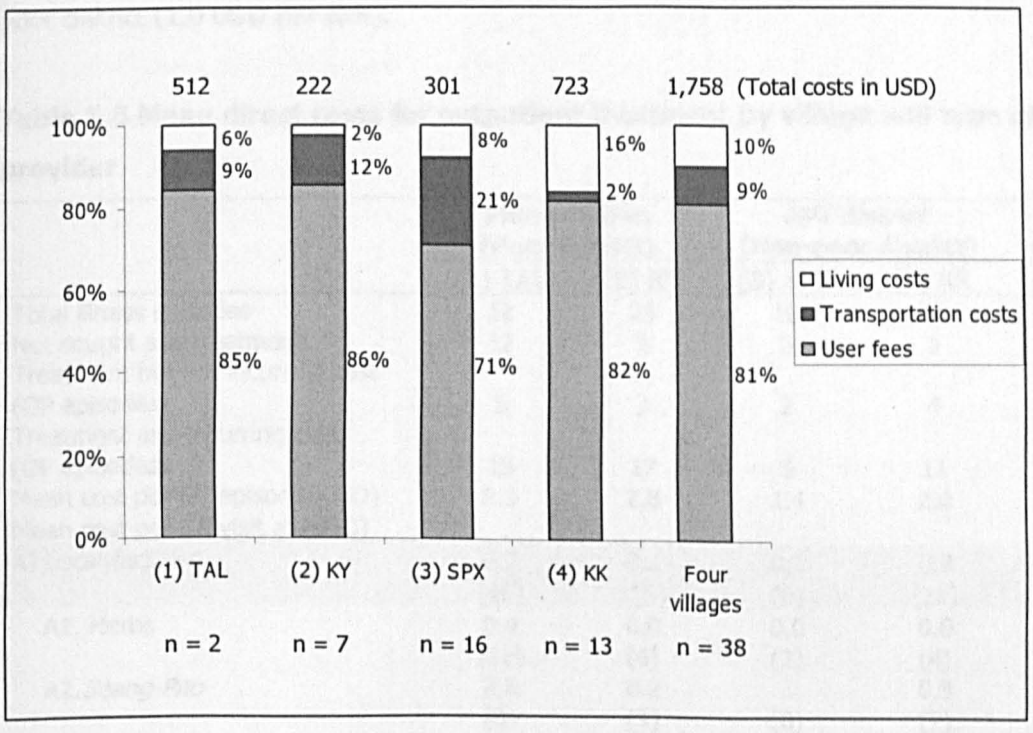
Both local facilities and public providers were important as the first choice for treatment in relation to admission across wealth groups, with private providers least used (figure 5.3). However, the better off the household, the more likely it was to access public providers for admission.

5.5 Costs of treatment for outpatient care and related to admission

Not all 103 illness episodes incurred costs since some of them did not involve seeking treatment and some treatment did not incur costs. Sixty three episodes sought treatment and costs were incurred for only 48 episodes. The analysis of cost of OP treatment was based on the 63 episodes where treatment seeking was involved. Costs of admission were incurred in all 38 people admitted and all of them were analysed.

This thesis focuses on financial or direct costs of treatment and does not consider indirect costs such as production loss caused by illness. Costs are presented in USD (10,000 kip = 1 USD). Financial costs of treatment were defined as all expenditures related to seeking care for relieving symptoms of the specified episode. They included (1) user fees at point of service plus costs incurred on all types of local facilities e.g., healers, traditional ritual, (2) transportation costs, and (3) living costs of patient as well as carers. Considering all 48 OP episodes with costs of treatment, user fees were incurred in all episodes but transportation costs and living costs were rarely incurred; only 1 OP episode at a health centre incurred transportation costs and 1 OP episode at a district hospital incurred transportation costs and living costs. User fees were nearly 100% of the illness costs while transportation and living costs were tiny. It was because villagers sought care locally which they normally reached by walking. In contrast, the majority of admissions (29 out of all 38 people admitted) incurred all three items of direct costs (user fees, transportation and living costs). Figure 5.4 presents the profile of costs incurred. It shows that user fees constituted the largest proportion at 81% of total costs while transportation and living costs represented smaller proportions at 9% and 10%, respectively. Transportation and living costs were incurred because the patient and carer(s) had to seek care from a district or provincial hospital. KK presented the lowest proportion of transportation costs (2%) as it is very near the district hospital and KK patients could easily reach the district hospital by walking or by wheel cart. Nevertheless, KK had the highest proportion of living costs of the four villages. This might be because the district hospital was near a market and the KK villagers used to spend money in the market.

Figure 5.4 Profile of financial cost of all 38 people admitted



Source: Village census

5.5.1 Mean cost of OP treatment

Table 5.5 presents mean direct costs incurred in all 48 OP episodes by each type of health care services. The mean cost per visit was 2.2 USD. VHV and herbs were the cheapest option at 0.1 and 0.2 USD per visit, respectively. On the other hand, traditional spirit (*Heet*) was by far the most expensive at 93 USD per visit because livestock sacrifice is an important ritual for *Heet*. It was 7 times higher than the mean cost at a district hospital and 103 times higher than that at a health centre. Across the villages and types of providers, the mean cost was lowest at the private providers, higher at the local facilities, and highest at the public providers (1.7, 2.6 and 3.5 USD per visit, respectively). One visit at public providers incurred high costs at 13.9 USD which comprised user fees, transportation and living costs. In addition, the public providers had a small number of visits (5 visits), whereas the local facilities made up 43 visits and private providers 40 visits. Comparing data among villages, TAL had the highest mean cost per visit (4.2 USD) because it had the highest mean cost of local facilities, especially *Seang-Pao* and *Heet*. It should be noted that the mean cost per

visit of villagers in the poor-district (2.8 USD per visit) was higher than that in the non-poor district (1.0 USD per visit).

Table 5.5 Mean direct costs for outpatient treatment by village and type of provider

	Phine district (Poor district)		APT district (Non-poor district)		Four villages
	(1) TAL	(2) KY	(3) SPX	(4) KK	
Total illness episodes	52	25	10	16	103
Not sought any treatment	32	5	3	1	41
Treatment but not incurring cost (OP episodes)	5	3	2	4	14
Treatment and incurring costs (OP episodes)	15	17	5	11	48
Mean cost per OP episode (USD)	8.5	2.8	1.4	2.0	4.2
Mean cost per OP visit at (USD)					
A) Local facilities	6.7	0.1	0.1	0.2	2.6
	(16)	(10)	(6)	(11)	(43)
A1. Herbs	0.4	0.0	0.0	0.0	0.2
	(12)	(6)	(2)	(4)	(24)
A2. *Seang-Pao*	2.8	0.2	..	0.3	0.9
	(3)	(3)	(0)	(7)	(13)
A3. VHV	..	0.1	0.1	..	0.1
	(0)	(1)	(4)	(0)	(5)
A4. Traditional Ceremony (*Heet*)	93.0	..	..	..	93.0
	(1)	(0)	(0)	(0)	(1)
B) Private providers	1.5	1.5	5.0	1.9	1.7
	(14)	(15)	(1)	(10)	(40)
B1. Private practitioner	1.5	2.2	5.0	..	2.0
	(9)	(9)	(1)	(0)	(19)
B2. Drug Store	1.5	0.3	..	0.8	0.9
	(5)	(4)	(0)	(9)	(18)
B3. Private clinic	..	0.7	..	12.3	4.6
	(0)	(2)	(0)	(1)	(3)
C) Public providers	..	4.0	1.5	..	3.5
	(0)	(4)	(1)	(0)	(5)
C1. Health centre	..	0.6	1.5	..	0.9
		(3)	(1)		(4)
C2. District Hospital	..	13.9	..	..	13.9
		(1)			(1)
Mean cost per OP visit for all types of providers	4.2	1.4	0.9	1.0	2.2
	(30)	(29)	(8)	(21)	(88)
	2.8		1.0		
	(59)		(29)		

Source: Village census

Note: Number in brackets is number of visits in the previous two weeks.
.. means no visit.

5.5.2 Mean cost of services related to admission

Across providers, the mean cost of services related to admission was higher than that for OP treatment. The public providers were the most expensive option for both OP treatment (3.5 USD per OP visit) and treatment related to admission (35.7 USD per encounter). All provider costs were high compared to mean villagers' consumption (0.8 USD per person per day).

Table 5.6 presents mean direct costs incurred in each type of health care service for each admission-related encounter and mean costs per person admitted of the four villages. This paragraph presents mean direct cost per encounter. The mean cost was lowest at the local facilities, higher at private providers, and highest at the public providers (4.2, 9.5 and 35.7 USD per encounter, respectively). As in the case of OP treatment, the VHV and herbs[7] were the cheapest option of services at 0.3 and 0.5 USD per encounter, respectively. Among the public health care providers, as expected, the mean cost of treatment related to admission at a health centre was the cheapest, followed by district hospital and provincial hospital (7.1, 38.4 and 115.7 USD per encounter, respectively). Similar to OP treatment costs for illness, the mean cost per encounter of villagers in the poor-district (23.7 USD per encounter) was higher than that in the non-poor district (20.5 USD per encounter).

Considering mean cost person admitted, TAL had the highest mean cost per person admitted (255.8 USD). However, the sample size was small with only two people admitted in TAL. KK village showed a very high mean cost at 55.7 USD per person admitted. SPX had the lowest mean cost at 18.8 USD per person admitted, and most services related to admission were at a health centre.

[7] VHV, *Seang-Pao* or herbs were involved in admission-related costs because a patient sought care from local facilities as an OP condition before went to a hospital for IP treatment.

Table 5.6 Mean direct costs associated with admission by villages and type of provider

	Phine district (Poor district)		APT district (Non-poor district)		Four villages
	(1) TAL	(2) KY	(3) SPX	(4) KK	
Total people admitted	2	7	16	13	38
Mean cost per person admitted (USD)	255.8	31.7	18.8	55.7	46.3
Mean cost per encounter at (USD)					
A) Local facilities	11.5	5.0	0.4	..	4.2
	(6)	(7)	(13)	(0)	(26)
A1. Herbs	0	..	1.0	..	0.5
	(2)	(0)	(2)	(0)	(4)
A2. *Seang-Pao*	3.8	1.0	0.0	..	2.1
	(2)	(1)	(1)	(0)	(4)
A3. VHV	0.4	..	0.3	..	0.3
	(1)	(0)	(9)	(0)	(10)
A4. Tradition event	61	5.7	0.0	..	11.9
(e.g., *Puk khan, Heet*)	(1)	(6)	(1)	(0)	(8)
B) Private providers	8.9	4.5	8.4	20.2	9.5
	(1)	(6)	(2)	(3)	(12)
B1. Private practitioner	8.9	5.4	3.0	..	5.6
	(1)	(5)	(1)	(0)	(7)
B2. Drug store	..	..	..	1.0	1.0
	(0)	(0)	(0)	(1)	(1)
B3. Private clinic	..	0.0	13.8	29.8	18.3
	(0)	(1)	(1)	(2)	(4)
C) Public providers	145	19.9	14.7	51.0	35.7
	(3)	(8)	(19)	(13)	(43)
C1. Health centre	..	4.4	7.5	..	7.1
	(0)	(2)	(14)	(0)	(16)
C2. District hospital	41.3	19.1	21.7	50.1	38.4
	(2)	(5)	(3)	(12)	(22)
C3. Provincial hospital	351.3	55.0	55.0	62.2	115.7
	(1)	(1)	(2)	(1)	(5)
Mean cost per encounter for all types of providers	51.2	10.6	8.9	45.2	21.7
	(10)	(21)	(34)	(16)	(81)
	23.7		20.5		
	(31)		(50)		

Source: Village census

Note: Number in brackets is number of encounters.
.. means no visit.
Costs of all encounters at health centre, district hospital and provincial hospital were for admission itself.
Three encounters (out of 4 encounters) at private clinic were for admission.
One encounter at a private practitioner was for admission but the rest (6 encounters) were treatment as OP condition.
All encounters of herbs, *Seang-pao*, VHV, traditional event and drug store were treatment as OP condition.

5.5.3 Mean cost for OP treatment and admission-related treatment by wealth groups

Cost levels differing by types of provider have been shown in table 5.5 and 5.6 above. In this sub-section, mean cost by wealth groups is shown for three categories of provider (local facilities, private providers and public providers).

Table 5.7 shows that costs of health services differed between wealth groups. The middle group faced the highest mean cost for OP treatment (6.9 USD per OP episode) but the worst-off group faced the highest cost related to admission (246.4 USD per person admitted).

Table 5.7 Mean direct costs across wealth groups reporting OP treatment and treatment related to admission

	Better-off	Middle	Worst-off	All villagers
Reported illness				
Total illness episodes	22	51	30	103
Not sought any treatment (episodes)	5	20	16	41
Treatment without cost (OP episodes)	5	6	3	14
Treatment with cost (OP episodes)	12	25	11	48
Mean cost per OP episode (USD)	1.8	6.9	0.7	4.2
Mean cost per visit at (USD)				
A) Local facilities	0.01	4.3	0.4	2.6
B) Private providers	1.8	2.3	0.5	1.7
C) Public providers	0.2	5.2	1.5	3.5
Admission				
Total people admitted	26	10	2	38
Mean cost per person admitted (USD)	30.3	47.7	246.4	46.3
Mean cost per encounter at (USD)				
A) Local facilities	1.2	2.5	17.5	4.2
B) Private providers	3.9	15.9	7.0	9.5
C) Public providers	24.3	41.4	136.3	35.7

Source: Village census

5.6 Discussion

5.6.1 Discussion of methodology

The village census health module was applied to every household member. In order to get the most accurate and reliable data, it was intended that every household member would answer the questions themselves except children less than 15 years old and elderly over 60 years old. The most knowledgeable person in a household, either the household head or housewife, was assigned to provide an answer for the latter. However, if adults (15-60 years old) were absent at the interview period, a proxy (the most knowledgeable person in the household) was allowed to answer on their behalf. In practice, almost all household members including children and the elderly were present at the interview period and almost all expected respondents participated in the interview themselves. Therefore, the study did not have a problem of using proxy respondents.

All interviews and focus group discussions were mainly conducted by the researcher with the assistance of the research assistant (RA). One advantage of the RA was that she had some background of *Lao Theung* and some of her relatives were *Lao Theung*. Villagers in TAL and KY villages were *Lao Theung*. All of them spoke *Lao* fluently but they generally spoke the *Lao Theung* language amongst themselves. It was found in the focus group discussion that, sometimes, they discussed in *Lao Theung* for a while and then turned into *Lao*. The RA or some FGD member translated that conversation for the researcher. Fortunately, this rarely occurred and it was in two villages, not all of four villages.

A problem occurred in all four villages when there was a question asking something related to timing (i.e. days and months). Questions were clearly asked about illness in the previous two weeks and admission in the previous twelve months but many villagers referred to illness and admission many years ago. Therefore, when villagers reported that s/he had experience of illness or admission, they were asked to specify themselves when (how many years or days prior to the interview date) to confirm whether their answer was relevant to the question or not. This type of cross checking with a respondent was needed for every question or discussion related to date and

time in every village. One possible explanation was that, from observation, no household had either calendar or clock and from the village census, few villagers had a watch. So recalling timing was probably difficult for the villagers. Only one household (out of a total of 172 households) could provide the exact year when their children were born and experiences of major events in the house because the household head recorded this information on a piece of paper.

It was surprising that costs of health services were not very difficult to obtain from the villagers. It seemed that they remembered fairly well how much they paid for user fees. Only two difficulties occurred. One was when they sacrificed livestock or poultry for a traditional ceremony; they needed to estimate how much it would be. For example they needed to think about the size of the livestock or poultry (e.g. small, medium or large) because it would yield different amounts. Another was that, sometimes, they forgot some treatment options they had sought. When they were reminded about that treatment option, they would simply answer an amount of user fees. One possible explanation might be related to local currency. The smallest value of local currency was 500 kip but it was rarely used. 5,000 kip and 10,000 kip were common. The villagers normally answered using thousand values e.g. 5, 10, 15, 20 thousand kip.

5.6.2 Overview of findings

In this chapter, the experience of the 172 households in the four villages was examined in terms of reported illnesses, access and use of OP treatment and admission, health utilization pattern and level of costs. These variables have been presented by districts, by villages and by wealth groups.

A total of 103 illnesses in the previous two weeks and 38 people admitted in the previous twelve months were reported by 92 households. The findings showed an inequity in self-reported illness and health service use by districts, villages and wealth groups (figure 5.5). The worse-off group and the worse setting showed higher rates of illness in the previous two weeks. Regarding access and use of OP treatment, the most advantaged village (KK) had the higher rates of use of OP treatment. The worse-off group and the worse setting had lower rates of admission. The gap of inequality in admission was wider than those in self-reported illness and use of OP treatment.

Many households (40% of total illness episodes) did not seek any treatment for their illness. When they sought care for OP treatment, they firstly sought care from local facilities or private providers e.g. natural herbs, *Seang-Pao*, private practitioners and private drug stores, depending on provider availability in the village. Public health care providers, health centres and district hospitals, were not the preferred option for OP treatment for many reasons notably perception of severity of illness, geographical barriers for a remote village, financial barriers and trust in providers. For hospitalization, public health care providers, especially health centres and district hospitals, were the most frequently used by the villagers. Nonetheless, the villagers were worried about provincial hospital admission because the household had to shoulder all financial costs including the referral cost.

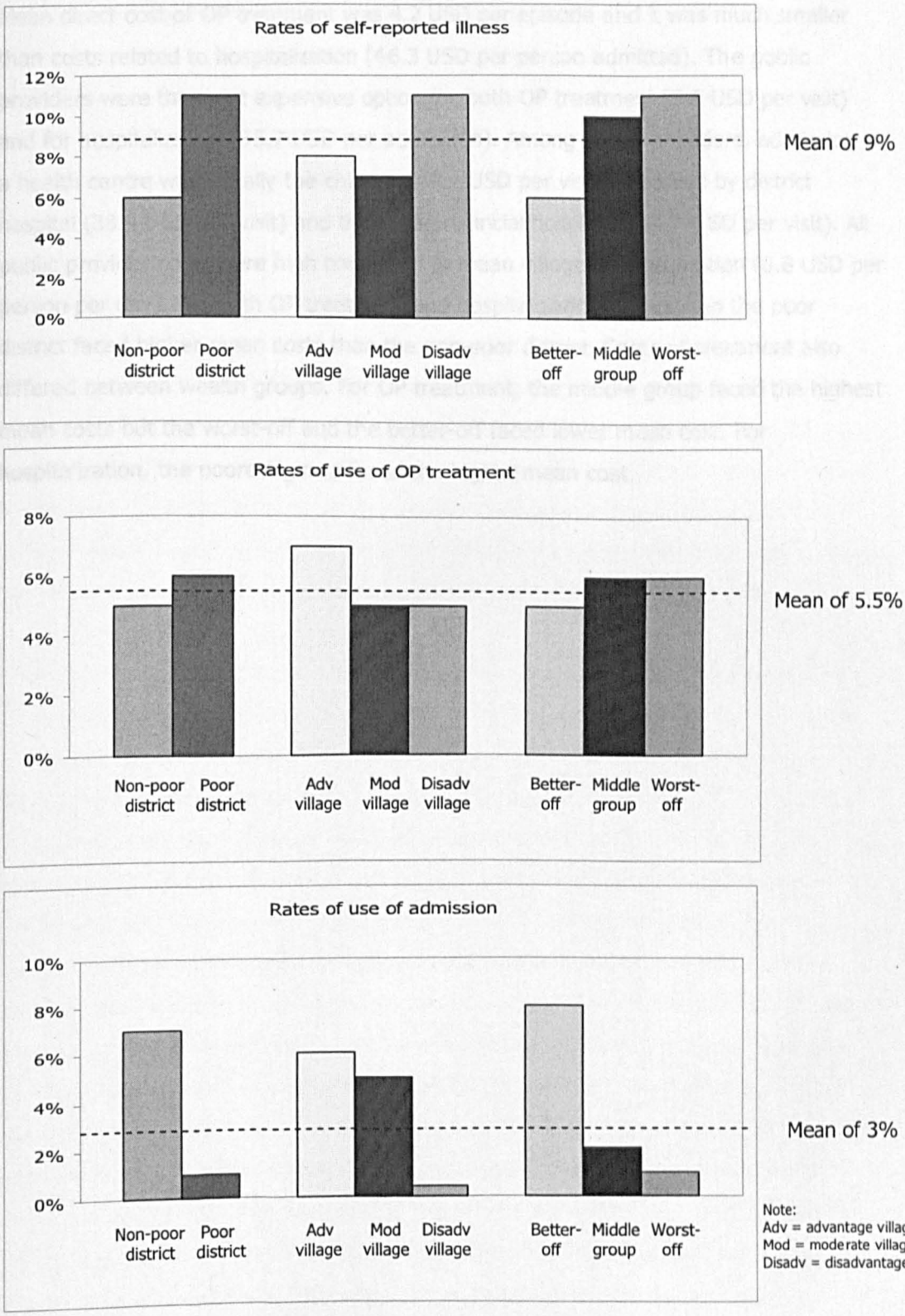


Figure 5.5 Rates of illness, use of OP treatment and admission among districts, villages and wealth groups

Mean direct cost of OP treatment was 4.2 USD per episode and it was much smaller than costs related to hospitalization (46.3 USD per person admitted). The public providers were the most expensive option for both OP treatment (3.5 USD per visit) and for hospitalization (35.7 USD per admission). Among public providers, admission at a health centre was usually the cheapest (7.1 USD per visit), followed by district hospital (38.4 USD per visit) and then the provincial hospital (115.7 USD per visit). All public provider costs were high compared to mean villagers' consumption (0.8 USD per person per day). For both OP treatment and hospitalization, villagers in the poor district faced higher mean costs than the non-poor district. Costs of treatment also differed between wealth groups. For OP treatment, the middle group faced the highest mean costs but the worst-off and the better-off faced lower mean cost. For hospitalization, the poorest group faced the higher mean cost.

5.6.3 Discussion of findings

With regard to the high rate of self-reported illness in TAL, it should be noted that the results from TAL might be influenced by seasonal variation because the interviews were conducted in the winter time, Dec 05-Jan 06. It was cold (around 10-15 degree Celsius) and windy. The researcher observed that the villagers wore unsuitable clothes, as some children were naked and some adults wore very light clothes. Most household members kept warm by sitting around the smoky fire on the ground beside the house in the evening. This might have caused greater incidence of illness. Nevertheless, the level of reported illness might be less than it could be, due to the perception of the villagers of illness. For example children had cold symptoms such as runny noses, sneezing, coughing and crying but their parents perceived that these were not illness. These were the ordinary features of children when the weather changed and then children would adjust. The fieldwork in the other three villages was conducted between the late winter and the summer and a situation similar to TAL was not seen.

The self-reported illness in the study was compared to national survey data in the Lao Expenditure and Consumption Survey III in 2003 (LECIII). This study found a higher annual per capita illness rate than the LECS III, at 9% in the previous two weeks suggesting a rate of 2.35 illnesses per person per year whereas the LECS III found a 14% prevalence in the previous four weeks which equals 1.82 illnesses per person per year (Lao PDR 2003). Various reasons could explain the differences. Firstly, the aims of the surveys and the questionnaires were different. The main purpose of the LECS III was to report on expenditure and consumption and the questionnaire consisted of several modules which required a longer interview period per household. In contrast, this study focused on the health module which made the questionnaire simpler than the LECS III. Secondly, the recall period might affect the prevalence result. A short recall period might enable the respondents to remember more accurately than a longer recall period. Duration of the interview and number of respondents in a household might also be factors – the respondents usually need time to think about the previous experience and, as observed during the fieldwork of the study, respondents in a household sometimes reminded each other of previous experience of illness. The relatively high illness rate among the villagers in this study may also be explained by the rural setting since illness is possibly higher among people in the lower socio-

economic classes (Bowling 2002) and in rural households, as in Thailand (Tangcharoensathien et al. 2006). In relation to hospitalization rates, the study found a prevalence of hospitalization of 3.3% per year. Unfortunately, hospitalization was not reported in the LECIII so cannot be compared.

The villagers' first choice was to seek care locally when they were ill. Herbs provided by a traditional healer or VHV were commonly used and they were cheap options since they involved no transportation costs. Private practitioners were also used, especially mobile practitioners in remote villages. Drug stores and private clinics were used by those who had easy access, from all wealth groups.

The VHV was supposed to be linked to the health centre and the district health system in terms of supervision and support from the drug procurement system for the Revolving Drug Fund (RDF) at the village level. The role of the VHV and RDF is to support healthcare in the community, especially in remote areas where the drug store is difficult to access. The VHV can contribute to the health service system not only by providing drugs to the villagers but also other health services including health education, disease prevention and health promotion for the community, birth/death records, and epidemic information. The latter has been done by volunteers for Avian Influenza surveillance in Thailand (SEARO 2007). It appeared that the VHV in these four villages functioned only in distribution of drugs, but not other functions in health development. The role of the VHV in drug distribution was still not fully successful. The VHV was used by villagers in only one out of four villages. Many factors influence the VHV's performance, for example in-kind incentives, acknowledgement and social standing and level of knowledge (SEARO 2007). Four VHVs were investigated in the study and it found that size of workload was one factor affecting the VHV's performance. The VHVs in KY and KK were responsible for more than one official task (deputy of village head plus VHV in KY and village head plus VHV in KK). Too much work at the same time was undermining the effectiveness of the VHV and RDF at village level. Even if the VHVs presented a proper knowledge and skill of their role, their services might be not popular due to the close proximity of the community to an area where varieties of health services were readily available (Kauffman and Myers 1997). The villagers in KK village, which is located near to a market, preferred the drug stores near the village to the RDF because the drug store had more variety of drugs.

However, it was widely accepted by villagers that if the VHV was fully active, the VHV and RDF would be very useful for the community, especially in a remote area

The private practitioners and the traditional healers who are expert in herbs were unregistered but they were popular choices of the villagers. It has been found also elsewhere, for example in rural Bangladesh, that people choose unqualified allopathic providers (untrained drug retailers/vendors) above formally trained practitioners or government health providers (Ahmed 2005). There were many possible factors that influenced the villagers' preference towards healers and unregistered private practitioners such as availability of healers in all four villages, trust in the private practitioner (in case of KY village) and convenience to reach them even in the remote area (mobile practitioner at TAL). An official registration of a provider was not of concern to villagers. They did not pay attention to whether the health facilities were officially registered or not.

This study found that public health care providers had not been a popular choice for health care provision in the previous two weeks. They represented only 4% of total health service seeking activities. The LECS III reported that, in the previous four weeks, only 10% of people with health problems had sought treatment from public health care facilities for a variety of reasons such as not considering the health problem serious, difficulty in accessing the facility, cost, quality of care and no possibility of cure (Lao PDR 2003). Geographical and financial problems were officially accepted as criteria to identify poor and non-poor settings in the National Growth and Poverty Reduction Strategy (NGPES) – (1) difficulty of travelling defined as over 6 hours from the village to a hospital; (2) inability of household to cover medical costs (Lao PDR 2004). Hence, geography and finance were considerable barriers to accessing health services in Lao PDR as a whole in addition to other factors e.g. perception of severity of illness and quality of care. The same reasons for unpopularity of public health providers, except quality of care, were found in this study.

Although the public health providers were not the main choice for OP treatment, they were the most frequently used for admission. The better-off could access the public health providers more easily than the worst-off. The villagers in the better setting had higher rates of hospitalization than those in the worse setting. KK villagers had easy

access to hospital admission when they needed it, because they lived near a district hospital, whereas the patients in the other villages mostly had to consult more health care providers before they reached the district hospital admission.

Cost of health services for OP and admission at public health providers were the most expensive compared to local facilities and private providers. Cost for OP service was smaller than for admission. These findings indicate that distance, inconvenience of transportation and costs of service were major barriers to access and use of public health services, especially for severe conditions.

The findings of the study present some similarities and some differences with other studies in Lao PDR. There was a household survey with 2,985 randomly selected households in all eight districts throughout the Oudomxai province in 2003/2004 (Dunlop et al. 2004). The survey (called 'the Oudomxai survey' hereafter) was conducted by the MOH and the Primary Health Care Project and funded by the ADB. Oudomxai province consists of many poor villages and poor districts similar to SVK province. Another study was conducted in a total of 60 household of urban districts in three provinces and published in an international journal (Paphassarang et al. 2002).

The findings of the thesis that people used public health providers less often was similar to the findings of the Oudomxai survey and the study by Paphassarang et al. The Oudomxai survey showed that government hospitals were used for only 8-10% of total reported illness episodes and health centres were used for 10-15% of total illness episodes. Paphassarang et al (2002) reported that people in urban areas utilized private providers as the first choice e.g. private pharmacies and clinics. In addition, treatment abroad (Thailand) was the preferred choice of the high socio-economic group. Dunlop et al. (2004) argued that low public use could partly be explained by the relatively high household expenditures occurred when a person sought care from government facilities which were the most expensive compared to other types of health services. As in this thesis, Dunlop et al (2004) reported that among the government facilities, health services at provincial hospital was the most expensive, district hospital was cheaper than provincial hospital and the health centre was the cheapest. However, the findings of the thesis on inequity in access to health care services across wealth groups were different to findings from the Oudomxai survey

which reported that the pattern of care seeking for the first source of care for villagers' illness was fairly similar across wealth deciles. The thesis supports the suggestion of Dunlop et al (2004) that further study is needed in order to answer why fees paid to public facilities were considerably higher compared to private and local facilities.

5.7 Concluding remarks

Material in the previous chapter on the context of the villages such as economic circumstances of households, geography, availability of health facilities in the village and common practice on health care behaviour, provided a good background to support insights into health service utilization in this chapter. The creation of wealth groups enabled the study to measure inequality in access to and use of health services.

This chapter has presented inequality in access and use of health services by geography (district and village) and wealth groups. It has shown that economic deprivation and the disadvantaged condition of the community acted as deterrents to use of health services. Many villagers who reported illness did not seek health care but whether they got better or worse was unknown. For those who sought care, local facilities and private providers were the preferred choices. The villagers perceived public health providers as a last resort. Many factors influenced the villagers' decision on health seeking behaviour including financial factors. Cost was a main barrier of accessibility to health services, especially for hospitalization. Costs of treatment at any provider were high in relation to mean household consumption. Public health services were the most expensive among the health facilities. The villagers are likely to have faced difficulty in paying user fees at point of service, especially an expensive hospitalization at a public health provider. Illness cost might result in negative consequences to the households. The practical strategies that households used in reaction to illness costs and their consequences are investigated and shown in the next chapter.

CHAPTER 6
COST BURDENS AND HOUSEHOLD COPING STRATEGIES

6.1 Introduction

This chapter analyses the data of households in the four villages in order to identify the financial burden of health care use on household consumption including household catastrophic health expenditure, and coping strategies that households adopted to deal with the costs of illness. This chapter therefore considers demand-side behaviour and perspectives in order to address the objective 3 of the study (To assess illness cost burden to households including identifying catastrophic health expenditure of households and assess the strategies households use to cope with costs of illness with an emphasis on taking up the exemption mechanism). In the context of this study, exemption from payment of medical bills was treated as a coping strategy. Households' attitudes on user fees are presented in relation to their effect on exemption awareness. This analysis provides the evidence for better understanding of demand-side reactions to illness and ability to cope with its financial consequences. A brief methodology is presented in the next section followed by the results of the study. An overview and discussion of the methodology and findings are presented subsequently, at the end of the chapter.

6.2 Methodology

Data were obtained from both quantitative and qualitative methods: village census, key informant interviews, focus group discussions and household in-depth interviews. Brief explanations of the village census, the key informant interviews and the focus group discussions have already been presented in the previous chapter. Hence, this section presents brief details of only the household in-depth interviews and approach of measuring household catastrophic health expenditure.

Based on the data from the village census combined with that on wealth groups from FGDs, further households were purposively selected for in-depth interview in order to obtain a mix of different wealth groups and experiences of illness (conditions treated on an out-patient basis in the previous two weeks and admission and death in the

previous twelve months). There were a total of 29 households selected for in-depth interview in the four villages (8 in TAL and 7 in each of the other three villages). In-depth interviews were conducted with an open-ended guide in order to gain an in-depth understanding of how and why the household reacted to illness and dealt with its financial consequences.

A crucial parameter in this chapter is health service cost burden as a proportion of household non-food consumption. As in other studies (Russell 2001 and Chuma et al. 2007), the costs of all OP treatments over the previous 2 weeks, and the costs related to admissions over the previous 12 months, were estimated on a monthly basis. To measure household health expenditure, costs incurred for each household's OP treatment and admission were totalled to find a monthly cost and then expressed as a percentage of monthly household non-food consumption (Appendix III). Applying the threshold recommended by WHO (2005), when the cost burden was equal to or greater than 40% of monthly household non-food consumption, it was defined as a catastrophic level of health expenditure. Costs of health services were obtained from the village census. Household non-food consumption was calculated using multiple methods based on the Household Economy Approach or HEA (Seaman 2000) which was explained earlier. Average consumption per equivalent person per day and profiles of food and non-food consumption were calculated for each wealth group of every village. These figures were assigned to every household in a village according to the wealth group that the household belonged to. The household consumption of every household was estimated by the average household consumption per equivalent person per day multiplied by the number of equivalent members in a household.

Analysis of quantitative data was done using SPSS® and Excel® and is presented using descriptive statistics. Analysis of qualitative data was manually done using a thematic content approach and is presented in descriptive narrative.

6.3 Cost burdens and catastrophic health expenditure

From the village census, a total of 92 households (out of a total 172 households) reported illnesses in the previous two weeks and/or admissions in the previous twelve months. Costs of health services were incurred in 64 households. Costs of all OP treatments and admission in a household were calculated as the monthly household cost burden and are presented in table 6.1. The mean cost burden of the four villages was 51% of monthly household non-food consumption whereas the median cost burden was 10%. The majority faced a cost burden of about 10% but a minority faced a high cost burden at 51% which was identified as catastrophic health expenditure. TAL had the highest median percentage, at 44% of monthly household non-food consumption. It meant that half of the households in TAL who reported illness which incurred cost and/or admission would likely face catastrophic health expenditure. The median cost burdens in the other three villages were lower than the catastrophic expenditure threshold (KY at 12%, SPX at 5% and KK at 4%).

Table 6.1 Household cost burden by villages

Monthly costs per household as % of monthly non-food consumption	Phine district (Poor district)		APT district (Non-poor district)		Four villages
	(1) TAL	(2) KY	(3) SPX	(4) KK	
HH reporting illness and/or admission with incurred cost, n	14	17	13	20	64
• Mean	180%	23%	10%	12%	51%
• Median	44%	12%	5%	4%	10%
• Minimum	0.9%	2%	2%	0.7%	0.7%
• Maximum	1695%	120%	25%	127%	1695%

Source: Village census

The cost burdens to households differed considerably between wealth groups (table 6.2). The middle and the worst-off group faced higher cost burdens than the better-off group. The mean cost burdens in the middle and worst-off group were higher than the catastrophic health expenditure threshold.

Table 6.2 Household cost burden by wealth groups

Monthly costs per household as % of monthly non-food consumption	Wealth groups			
	Better-off	Middle	Worst-off	All
HH reporting illness and/or admission with incurred cost, n	22	31	11	64
• Mean	10%	81%	50%	51%
• Median	6%	12%	18%	10%
• Minimum	1%	0.7%	2%	1%
• Maximum	79%	1695%	354%	1695%

Source: Village census

Table 6.3 shows the number of households with catastrophic health expenditure over the total number of households with health care costs. These figures are presented by villages and wealth groups. Overall, sixty four households (out of 172) faced costs for illness treatment and admission. Among them, 12 households faced catastrophic levels of health expenditure (based on the threshold of 40% of monthly non-food consumption) – 10 households due to the cost of OP treatment and two households due to the cost of admission.

Table 6.3 Household catastrophic health expenditure by villages and wealth groups

	Phine district (Poor district)		APT district (Non-poor district)		Four villages
Wealth groups	(1) TAL	(2) KY	(3) SPX	(4) KK	
Better-off	0/0	1/6	0/7	0/9	1/22
Middle	5/10	2/8	0/5	1/8	8/31
Worst-off	3/4	0/3	0/1	0/3	3/11
All groups	8/14	3/17	0/13	1/20	12/64
Two villages in a district	11/31		1/33		

Source: Village census
Note: Figures in the table show number of households with catastrophic health expenditure/the total number of households with health care costs.

Almost all of the households with catastrophic health expenditure (11 out of 12 households) were in the Phine district (the poor district) and all of them were *Lao Theung*. It was clear that TAL households had the highest possibility of catastrophic health expenditure (57% or 8/14 households) while the other three villages had a lower possibility, especially the villages in APT district (the non-poor district).

Across wealth groups and villages, the worst-off and middle groups in TAL were the most vulnerable to catastrophic health expenditure (75% or 3/4 households and 50% or 5/10 households, respectively).

Across wealth groups, when households faced health care costs, there was a high possibility that this would be catastrophic for the worst-off and middle group at 27% (3/11 households) and 25% (8/31 households) respectively, while the better-off had a low chance at 5% (1/22 households).

The quantitative data could present the numbers of household with catastrophic expenditure but it was not able to explain any consequence of high cost burden to the household. Qualitative data could complementary provide great better understanding on household catastrophic health expenditure. Hence, the next section will provide overview of samples for household in-depth interviews which would be used to explain details and consequences of catastrophic expenditure later.

6.4 Illness pattern from household in-depth interviews

This section presents information from in-depth interviews of sampled households in terms of their wealth group, condition of illness, health care costs burden, households with catastrophic levels of expenditure, and negative outcomes e.g. patient disability or death.

In total, household in-depth interviews consisted of 8 better-off households, 15 middle households and 6 worst-off households (table 6.4). Most of the households (18 households) had experienced only 1 episode of either illness or admission or death in a household whilst some of them (11 households) had experienced multiple conditions such as many illnesses or admissions in a household. Concerning experience of treatment seeking, four households (TAL 4, SPX 5, SPX 6 and KK 7) did not seek any treatment and all patients in these four households faced negative health outcomes: death or disability.

Table 6.4 Summary of information from in-depth interviews

	Wealth group			Conditions				Treatment costs burden (% of HH non-food consumption in a month)	Catas-trophic health expendi-ture**	Note on negative health outcome (death or disability)
HH ID	Better-off	Middle	Worst-off	OP service	Ill but no tx	admission	Death			
TAL	0	6	2	9	1	2	2		4	
TAL 1		/		1				1695%	/	
TAL 2		/		2		1		17%		
TAL 3		/		1				0%		A boy lost his fingers.
TAL 4		/			1*			0%		A girl had mental disability.
TAL 5		/					1	0%		A baby died.
TAL 6		/					1	57%	/	
TAL 7			/	3				44%	/	
TAL 8			/	1		1		354%	/	
KY	3	3	1	5	0	3	2		3	
KY 1	/			2				79%	/	
KY 2	/					1		6%		
KY 3	/						1	22%		
KY 4		/		1		1		47%	/	
KY 5		/		2				189%	/	
KY 6		/					1	34%		
KY 7			/			1		18%		
SPX	2	3	2	2	1	8	3		0	
SPX 1	/					5		5%		
SPX 2	/					1		8%		
SPX 3		/		1		1		25%		
SPX 4		/				1		13%		
SPX 5		/			1*		1	0%		A girl had mental disability and a baby died.
SPX 6			/				1*	0%		A boy died.
SPX 7			/				1	2%		An elderly died.
KK	3	3	1	1	0	9	2		1	
KK 1	/					2		9%		
KK 2	/					1		13%		
KK 3	/					4	1	13%		
KK 4		/		1				89%	/	
KK 5		/				1		13%		
KK 6		/				1		23%		
KK 7			/				1*	0%		A girl died.
All 29 HHs	8	15	6	17	2	22	9		8	

Source: Household in-depth interview

Note: * No treatment for the patient and the patients died or were disabled.
**Catastrophic health expenditure defined as equal to or greater than 40% of monthly household non-food consumption.

6.5 Level of catastrophic health expenditure and its consequences

The household in-depth interviews revealed that the impact of catastrophic health expenditure on household livelihoods varied, depending on household capacity to absorb health expenditure – in turn linked to its asset base and number of members (the more adult members, the better it was able to manage risk). Finally, the status of the sick person also mattered – more serious consequences would result when the patient was the breadwinner rather than a dependant.

As known from the village census, the level of catastrophic health expenditure varied greatly, from 43% to 354% and 1695% of monthly household non-food consumption. Even low levels of health expenditure could become catastrophic, especially for the worst-off. For example, an amount of 1.65 USD for illness treatment generated catastrophic spending levels of 44% of household monthly non-food consumption (Box 6.1).

The highest cost burden of OP treatment (1695%) occurred in the middle group and the highest cost burden of admission (354%) occurred in the worst-off group. These two households were in TAL and in both cases expenses were exacerbated by the *Heet* ceremony due to the sacrifice of a cow for a ritual offering. The catastrophic health expenditure level at 1695% did not affect the household consumption long term (Box 6.2) whereas the high cost burden at 354% was harmful to the household. It squeezed the household from the worst-off group into an ultra poor category (family with many young children, non-permanent house, no assets and having debts) and then impoverishment (Box 6.3).

Box 6.1: Household TAL 7

This household lived in the poor district and was far from public health care providers. It was classified as being in the worst-off in the village. The household had a total of 5 members: a household head (a widow, aged 46), 3 young sons (aged 12, 8 and 7) and 1 young girl (aged 9). The female household head was the only main worker in the household. The main occupation of the household was rice farming, exactly the same as other households, despite its lack of labour.

The household reported 3 illnesses in the previous 2 weeks. The household head and 2 children got fever. They took analgesic drugs which the household head bought from a drug store in a market and kept in-house. The symptoms of the household head and the eldest child got better but the symptoms of the second child continued. The household head sought care from a private practitioner who came to the village. The second child then recovered. The fees for the private practitioner were 1.5 USD. The household head had only 1 USD in hand at that time. She requested the private practitioner a delayed payment of 0.5 USD for duration of 10 days. She would repay later by seeking natural torch material from a tree in the forest and digging for small frogs.

The costs of treatments for 3 illnesses were estimated at a total of 1.65 USD and accounted for 44% of monthly household non-food consumption – catastrophic health expenditure.

Source: Household in-depth interview

Box 6.2: Household TAL1

This household was ranked as a 'middle group' in the remote village, TAL. The family consisted of six members (3 adults and 3 teenagers). The household head was the *Sanadee*, an executive of the local authority, who was a ritual leader. Most villagers, including the village head, respect the *Sanadee*. The house was built from permanent materials, wooden poles, walls and floors and corrugated iron roof. The household head owned 1 Tak-tak, 2 bulls, 3 pigs, 2 ducks and 20 chickens.

The household head's mother (aged 85) had been ill for the two weeks before the interview with symptoms such as a cough, fever, fatigue and pain in her joints. In responding to her illness, the household adopted three treatment actions; using a local herb, visiting a mobile private practitioner and conducting *Heet*. The traditional offerings of this household included edible and non-edible items: a cow, a chicken, rice liquor, sticky rice, potato, banana, top parts of rattan, sugar cane, shrimps, shells, cash, an egg, a cup of uncooked rice, a piece of cloth, a ring, a comb and earrings. The last six items were placed in the house for three days while the others were cooked for food. The *Heet* was arranged early in the morning. Most households in the village came to join the *Heet*. The family served the participants with sticky rice, many other dishes and rice liquor.

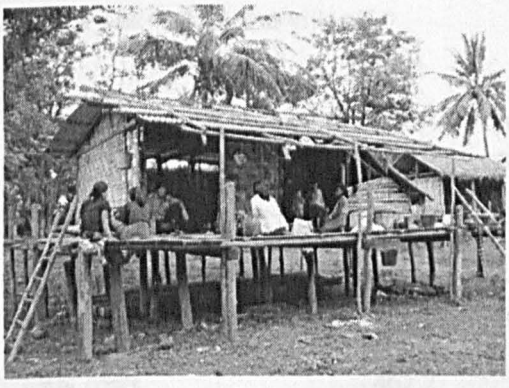
The total health expenditure of the three actions accounted for 98.9 USD or 1695% of household monthly non-food consumption. The cost was particularly high because the *Heet* ceremony involved the sacrifice of a cow (93 USD). Despite the high cost, the household paid willingly and the patient enjoyed having the celebration in her house. She was happy to see many relatives and neighbours come to her house.

The high cost burden had neither short nor long term effects on household consumption as it had a range of other assets for routine living e.g. adequate amount of rice for the whole year, poultry, livestock and a Tak-Tak. Significantly, the household still had the same labour numbers to generate its own products. The patient was a senior person and so not a main labourer in the household.

Source: Household in-depth interview

Box 6.3: Household TAL 8

This was categorised as a 'worst-off' household and was located in a remote village, TAL village. It had eight members: a couple and their six young children (ages 7 months – 11 years). The house was a semi-permanent structure, with poorly made wooden joists, bamboo sheet walls and an unfinished roof over the porch. The household head did not own a Tak-Tak, but owned 2 small pigs and 2 chickens.



In addition to rice farming, the household head (named BL hereafter) sometimes did daily labouring (wood sawing) which provided an additional income. BL and his wife were only two main labourer of the household.

The household reported 2 conditions:

1. An illness in the previous 2 weeks: The youngest child (aged 7 months) had diarrhoea for 3 days. BL's wife had given him natural herbs.
2. An admission in the previous 12 months: BL had abdominal pain which was discovered to be a ruptured appendix during the previous month of the interview period. A total of 7 encounters were applied to try to relieve his symptoms. When he had occasional abdominal pain, ***Seang-Pao*** (including local **herbs**) of many healers in the village was the first choice. The following day **a private practitioner** gave him a treatment. Two days later, the ***Heet*** was conducted for him. Despite an incomplete *Heet* process, BL was taken to the district hospital because of his worsening symptoms. Taking 8 hours to travel 67 kilometres, BL arrived and was admitted to the **district hospital** for 1 night and then he was referred to the provincial hospital the next day.

(Continued next page)

Box 6.3: Household TAL 8 (continued)

The district hospital did not have an ambulance so the villagers had to shoulder transportation cost themselves. They hired a private car to take BL to **the provincial hospital**, taking around 7 hours to travel approximately 160 kilometres. BL had surgery and was admitted to the provincial hospital for a total of 10 days. BL was back to **the district hospital** for 5 days admission to recover. Thereafter, BL and his carers hired a Tak-Tak to the village.

Financial costs by type of provider are shown below.

	User fees (USD)	Transportation costs (USD)	Living costs (USD)	Total (USD)
1. *Seang-Pao* and herbs	2.8	0	0	2.8
2. Private practitioner	8.9	0	0	8.9
3. *Heet*	61.0	0	0	61.0
4. DH (twice, 6 days)	12.0	13.0	14.6	39.6
5. PH (10 days)	318.0	26.3	7.0	351.3
Total costs	402.7 (87%)	39.3 (8%)	21.6 (5%)	463.6 (100%)

DH: district hospital; PH: provincial hospital.

Together these cost 463.6 USD or 354% of monthly household non-food consumption. To cope with this cost the household adopted multiple strategies: using their limited savings; sacrificing half a cow for *Heet* and selling half for cash; selling livestock; selling wooden poles prepared several months ago for a new house, borrowing money and getting support from relatives and neighbours. They even announced their need for help on the local radio, hoping to get financial support from relatives in other villages. This high cost burden combined with the coping strategies and limitation of only two main labourers in the household led to household impoverishment. After the patient completed treatment, the family had neither poultry nor livestock left. On the other hand, he had debts from the hospital admission.

> *'... When I was ill,... I lost opportunities to earn; normally I would go to the forest to hunt wild animals and sometimes did daily labouring. I don't know how long it will take to repay the debts - more than 100-200 USD ... perhaps 2-3 years if I'm lucky... If I had not been ill, we would not have debts and would be able to construct a new permanent house...'*

Source: Household in-depth interview

6.6 Coping strategies

As suggested by the above examples, when illness confronted the households, they had many approaches to deal with the problems. Those approaches used by the households were grouped into two main coping strategies; cost prevention strategies and cost management strategies, as in another study (Russell 2001).

6.6.1 Cost prevention strategies

From the village census, about 40% of the people reporting illness episodes adopted the cost prevention strategy of not seeking treatment, as presented earlier. This was largely among households from the better-off and worst-off groups. TAL, the remote village, showed a higher rate of not seeking treatment.

From the 29 households with which in-depth interviews were conducted, four households reported not seeking care for the illness of a household member. These four households were spread over the poor and the non-poor districts - one was the middle group in TAL, two in SPX (one in the middle group and another in the worst-off) and another was amongst the worst-off in KK (table 6.4). *'Lack of money'* or *'being poor'* were first cited as reasons for not seeking care. When probed with the question 'suppose you had cash available at that moment, would you seek care or not?', all the four households still said they would not seek care and they explained their reasons. Two households stated that *'It was a simple symptom, not serious.'* One household gave a more surprising reason that *'It was at night and they did not dare to wake up health staff.'* Two households reported that there was *'no effective treatment available for the illness'* and *'no hope'.* Therefore, it appeared that lack of cash was not the most significant reason for not seeking care.

While cost prevention strategies sometimes were followed by recovery, at other times, they were not. In the four households which adopted the cost prevention strategy of not seeking care, all experienced health outcomes of death or disability. Boxes 6.4 and 6.5 present examples.

Box 6.4: Household SPX 6

This household was classified as worst-off. There were 5 household members: 2 adults (aged 45 and 40) and 3 children (aged 17, 12 and 11).

The second child of the household (a boy, aged 13) had died in the previous twelve months. The boy got abdominal pain in the late afternoon. His symptoms worsened at 9.00 pm and became very serious at 05.00 am the next day and finally the boy died around 05.00 am without any treatment. The parents thought that they would seek care for the boy in the early morning but he died at dawn. They gave their reasons for not seeking any treatment for the boy as follows:

1. It was at night. They were not familiar with the health staff and were afraid to wake them for treatment at night. They would wait until morning.
2. Perhaps, the boy might recover by himself. They didn't think that it was very serious. They took it lightly (*Theou Bao*).
3. They did not have enough money to seek care from a public health care provider. They only had 10 USD in hand that night. They needed at least 20-30 USD to seek care at a health centre or 50 USD at a district hospital.
4. They did not own a Tak-Tak and it was difficult to travel to seek care, especially at night.

They had considered his illness to be minor but they had also not sought care for other reasons. If the above conditions had been satisfactory, they would have sought care. This household did not even tell the neighbours about the boy's condition that night. Nobody knew until the morning. The household head just informed his neighbour, the village head and the village authorities in the early morning that his son died. The household head said in a local dialect that *'If someone has blurred vision and/or a hearing impairment, it is difficult to go somewhere'.*

Source: Household in-depth interview

Box 6.5: Household TAL 4

This household was ranked in the middle group in the village. There were 7 household members: two adults (aged 42 and 35) and five children (aged 16, 14, 10, 9 and 7). In the two weeks before the interview, the second child (girl, aged 14) had had convulsions three times in one day. No treatment was given to her. She had been having convulsions since she was one year old. Several treatments were tried including traditional healing, natural herbs, private practitioners and drugs from a private clinic. In March 2005 she had a convulsion and put her left hand in a fire. Her family treated her burnt fingers themselves, by applying a mixture of toothpaste, antiseptic syrup, antiseptic powder and well water to the burn. Ultimately, she lost her fingers. At this moment, only the thumb of her left hand works. The girl usually had convulsions 3-4 times a day, around 4-6 times a month in 2005. She was given neither medicine nor natural herbs. Her father stopped thinking he could treat his daughter's illness in 2005 for many reasons, particularly, lack of money and lack of knowledge of effective treatment.

> *'It was too difficult and too expensive to get to a clinic or a hospital. I could not afford medicine as well as the transportation costs. We needed at least 20-30 USD to go to a hospital. I don't think I could earn that much money... and even if I had money I don't know where to go for a good treatment. Even in a better-off household, a boy has similar symptoms to my daughter and he's never recovered, how could my daughter recover?'*

Source: Household in-depth interview

6.6.2 Cost management strategies

Even though households lacked cash in hand when they got ill, they preferred to seek care from whatever provider was available in the village so they could manage the cost later. Results from all the focus group discussions in the four villages clearly revealed that *'despite lacking cash; they would fight the illness'*. They firmly pointed out that *'they would not die without seeking any care'*. They had several options for cost management strategies to deal with illness costs.

In the village census, respondents were asked which mechanism they adopted to deal with total costs of treatment. Table 6.5 shows that since the cost of OP treatment was typically much less than admission, the management strategy for cost of OP service was less complicated than for admission. Analysis of the coping mechanisms by wealth groups did not show any significant difference from those analysed by village. Therefore the data on cost management strategies analysed by village are presented in this sub-section.

There were a total of 58 times that coping mechanisms were adopted for 48 illness episodes with health care costs. The majority of illness episodes (81% or 39 out of a total of 48 episodes) were managed with a single coping mechanism. Only a few of them were managed with a combination of coping mechanisms. The cost management strategy for admission was more complicated than for OP treatment due to the greater cost of admission. There were a total of 66 instances of adopting coping mechanisms for 38 people admitted. The majority of them (58% or 22 out of a total of 38 people admitted) were managed using a single coping mechanism. The rest were managed with a combination of coping mechanisms; 24% by two coping mechanisms and 19% by three – five coping mechanisms.

Table 6.5 Coping mechanisms to deal with cost of OP treatment and admission

	Phine district (Poor district)		APT district (Non-poor district)		Four villages	
	(1) TAL	(2) KY	(3) SPX	(4) KK		
Illness in the previous two weeks						
Number of illness episodes incurred costs	15	17	5	11	48	
Mean cost per episode (USD)	8.5	2.8	1.4	2.0	4.2	
Coping mechanism used (n)						
• Use savings	13	15	4	11	43	(74%)
• Selling assets	2	3	1	0	6	(10%)
• Non-cash payment	4	0	0	1	5	(9%)
• Delay payment to provider	1	2	0	0	3	(5%)
• Borrowing	0	1	0	0	1	(2%)
• Total	20	21	5	12	58	(100%)
Number of coping mechanisms per episode						
• Single coping mechanism	10	14	5	10	39	(81%)
• Two coping mechanisms	5	2	0	1	8	(17%)
• Three coping mechanisms	0	1	0	0	1	(2%)
• Total	15	17	5	11	48	(100%)
Admission in the previous twelve months						
Number of people admitted	2	7	16	13	38	
Mean cost per person admitted (USD)	255.8	31.7	18.8	55.7	46.3	
Coping mechanism used (n)						
• Use savings	1	5	15	9	30	(45%)
• Selling assets (livestock, rice, joist)	2	4	3	7	16	(24%)
• Borrowing	2	2	-	4	8	(12%)
• Non-cash payment	-	6	-	-	6	(9%)
• Getting support from neighbours	2	3	-	-	5	(8%)
• Government support	-	-	-	1	1	(2%)
• Total	7	20	18	21	66	(100%)
Number of coping mechanisms per person admitted						
• Single coping mechanism	-	1	14	7	22	(58%)
• Two coping mechanisms	-	3	2	4	9	(24%)
• Three coping mechanisms	1	-	-	2	3	(8%)
• Four coping mechanisms	1	2	-	-	3	(8%)
• Five coping mechanisms	-	1	-	-	1	(3%)
• Total	2	7	16	13	38	(100%)

Source: Village census

Using savings was the most common strategy for dealing with costs of both OP episodes and admission. Most households had some amount of cash in hand when they sought care. Only a few of them (5 out of 48 illness episodes and 7 out of 38 people admitted) had no available cash at that moment. They normally adopted other coping mechanisms.

Selling assets was also quite widely used by households. Poultry was normally sold to cope with costs of OP episodes. In case of admission, many types of assets were sold, for example poultry, livestock, rice and timber joists which had been prepared for a new house. Data from FGDs and in-depth interviews revealed that assets were normally sold within the village in order to get a reasonable price. The respondents reported that this was a kind of social network through which they could help each other within the community. Nevertheless, one household head from the household in-depth interview described his experience of getting a 10% lower price than expected when he had to sell a cow urgently to pay medical bills of his daughter.

Non-cash payment was a strategy used to deal with cost of illness, especially for traditional services which were not costly. Nonetheless, in one household in KK, the patient gave cash and 20 kg of rice to a private clinic as payment (Box 6.6). This resulted in the highest cost burden due to OP treatment in KK village, 36% of monthly household non-food consumption.

Box 6.6: Household KK 4

This household had only two members: a household head (aged 63) and his wife (aged 56). This household was classified as a middle group in the village.

The household reported one illness in the previous two weeks. The housewife had a skin rash on her waist. She tried three different types of care for her symptoms; *Seang-Pao,* herbs and a private clinic. She got free treatment at the point of service because she had a close relationship with the doctor. After recovering from her symptoms, a month later, she gave the doctor 5 USD and 20 kg of jasmine rice. The total value of the payment to the private clinic was 12.3 USD.

The household was very concerned to repay the private clinic. They thought that even though they did not have cash in their pocket, they were able to get care from this private clinic. They were so eager to give something in return because the doctor was so kind to them. After repaying the doctor, they felt proud of themselves [they proudly smiled all the time when they told their story].

Source: Household in-depth interview

Borrowing was the third most frequently used strategy for admissions. Although the amount of borrowing was high (ranging from 10 to 347 USD), almost all respondents in village census said that there was no requirement for a credit guarantee and no interest paid. Respondents in only two households mentioned capacity to repay as an issue influencing access to credit. One said there was an implicit guarantee of capacity to repay, indicated by having assets such as livestock. Another said the housewife had borrowed money from her parents and had given them a cow as a guarantee. If she could not find money, she would repay them with the cow. If she was able to earn money, she would repay with cash and get her cow back. Data from all FGDs backed up the idea that borrowing within the village for basic needs would not incur interest and no explicit guarantee of repayment was demanded, regardless of wealth group or status in the village. The focus groups explained that 'basic needs' means health, education and housing. According to the four villages' experiences, all of the borrowings were for health purposes, only one case for housing, which had suffered fire damage, and never for education. The focus groups further revealed that the borrowing for health was unlike the borrowing for doing business such as investment in rice fields or livestock which would incur interest.

Getting cash and non-cash support from neighbours and relatives were incurred for cases of admission, but not OP treatment. One household had broadcast on local radio and hoped for financial support from relatives in other villages, as presented earlier in Box 6.3. It should be noted that psychological support from neighbours and relatives was very common for both OP episodes and admissions. For example many neighbours and relatives voluntarily came to see and stay with a patient in a patient's house or many villagers accompanied a patient to a provider even though they could not help.

Support from government was reported by one household when a boy had been injured in an explosion in the forest near the rice field. When he received care in the provincial hospital, the unexploded ordnance (UXO) decontamination programme subsidized some of the treatment costs.

Delaying payments of user fees to providers such as a private practitioner, health centre or district hospital were commonly mentioned by households. Several households had experience of delayed payment but they had now paid. They did not want to be recorded as delaying payment. The household perceived that they just prolonged a payment period for a while in order to have enough time to earn cash. They normally delayed for a short time, 4-5 days – just enough time to return to the village and sell their assets. They could eventually repay the providers and there was no interest charge.

Data from household in-depth interviews showed that four households had had experience of delayed payment (three households at public providers and one household at a private practitioner) and none paid interest. Another two households did not have experience of delayed payment but thought it would not be difficult to be allowed to delay payment.

> *'It is very easy to ask the doctor (at health centre) for delayed payment. He is very nice. He knows every household in the village and vice versa. He never told me how long we had to repay. But we deliberately told him that we could repay within a week. In fact I could not keep my promise, so I went to tell him and asked for a longer period of delayed payment. I just wanted to see him and inform him, not disappear quietly. He easily accepted without getting angry.'*
>
> (A household in-depth interview, SPX 1; admission to a health centre)

> *'The doctor was so kind to allow me (a patient) to go back home and find the money to repay him whenever I could have enough cash. It was our responsibility to repay him. He gave us treatment and the patient recovered because of his treatment so we had to pay him. Eventually, next time when we were sick we had to see him again.'*
>
> (A household in-depth interview KK 4; care at a private practitioner)

On the other hand, another five households were not positive about delayed payment at public providers (a district hospital and a provincial hospital). They thought it was very difficult to be allowed to delay payment unless the households had some capacity to repay, for example having a relationship with the health staff or having livestock at home.

> *'We (a parent of a patient) must own livestock otherwise we would not have dared to ask the doctor to delay payment and he also would not accept my request. How could we delay payment, if we did not have a relationship with the health staff or own livestock.'*
>
> (A household in-depth interview, KK 3: admission to a district hospital)

> *'I (a relative of the patient) felt scared to talk to the health staff even when he asked me about the patient. Whenever he came to see the patient, I just stood away from him. I did not mention delaying payment. We were able to delay payment because the deputy village head came with me and he talked to the health staff. If he had not come with us, I definitely would not have asked for delayed payment. [The deputy of the village head said] It was difficult to be allowed to delay payment. The health staff asked many questions until she felt comfortable about allowing us to delay payment, for example what was the relationship between the patient and me, whether the patient has other relatives, any livestock owned by the patient, how could you repay .... Oh! She asked until I felt tired. Sure, she must ask until she felt confident that we could repay. It was not such a bad situation because I could communicate with the health staff. Can you imagine? How could the villagers understand what they should say or answer to the health staff?'*
>
> (Household in-depth interview, TAL 8: admission to a provincial hospital)

Exemption was asked about as a coping strategy for dealing with OP treatment and admission. In the questionnaire of the village census, every adult was asked whether they had known about exemption or not. In addition to knowledge of exemption, the households which had reported illness and had sought care from public providers were asked whether they had experience of asking for or receiving exemption from user fees from the hospital or not. Apart from the households of the village head and the VHV in SPX, no household in the four villages had heard of exemption at public health care providers. All households which had experience of seeking care from public providers never requested or received exemption for curative care from public providers. Details of households' perspective towards exemption are presented in the following sub-section.

6.7 Households' perception on user fees and exemptions

This sub-section presents attitudes of households on paying user fees and on exemption at public health providers. The study found that households have a strong position towards user fees which had a profound influence on exemptions.

6.7.1 Households' perception on user fees

All twelve focus groups (3 groups per village in the four villages) and twenty nine household in-depth interviews showed the same idea. All of them confirmed emphatically that a patient must pay user fees to public health providers. Their reasons can be classified as follow;

- Public health care service belonged to *the government*. The people had to pay for government services. The government had financial constraints and the people must support the government. (3/12 FGDs and 2/29 household in-depth interviews).

> *'Someone has to pay for treatment costs. Who would pay, if we did not pay? The government has no money to support it [exemptions].'*
>
> (FDG of the village committee in TAL)

- *No money, no treatment* at all. A patient at least must pay for drugs. Nothing was free even a traditional spirit service, *Seang-Pao*. (6/12 FGDs and 9/29 household in-depth interviews).

> *'We have to have money in hand before going to a hospital. If we have no money, we will be not able to get any treatment. Patients have to pay user fees not only in public providers but also every type of provider. When we sought care from Seang-Pao, we also paid a healer.*
>
> (FGD of the males in SPX)

> *'We [households] had to buy drugs. How can we get free drugs? The patients have to pay, at least, for drugs so that drugs would be available for the next patient.'*
>
> (Household in-depth interview, TAL 6)

- This was *a business era*. (3/12 FGDs)

> *'During the war period, treatment was free for everybody. But now, everything has changed. This is the business era. Everything revolves around investment, selling and buying. Hospitals also have to invest. They have to buy drugs from private companies; they do not get free drugs.*
>
> (FGD of the village committee in SPX)

- It *was shame or stigma* if they did not have money to pay user fees to providers. (4/12 FGDs and 3/29 household in-depth interviews) One household in-depth interview (TAL 8) provided a better understanding of the stigma they suffered. It was caused in two ways: (1) health staff frequently asking for money and (2) asking for money in front of other people. No respondent mentioned rudeness from the health staff.

> *'I [a patient's relative] did not want to see a health staff member. He came to see the patient at the ward [of a provincial hospital] and he asked us every day about money to pay for treatment. I felt extremely embarrassed because of the other persons around there. He spoke with his normal voice but everyone could clearly hear. There were so many people in the ward; other patients and their relatives. It seemed that everyone looked at us (interviewee and the patient) and they were waiting to hear the answer. I supposed that other people probably had more money than us. Ms. A [supposed name of another relative] quickly disappeared from the ward if a health worker was coming. [Ms. A said] Why did I have to stay? I felt too ashamed to stay.'*
>
> (Household in-depth interview, TAL 8)

- It was *an obligation of patients* to pay user fees and it was dependent on household capability to deal with the payment. (4/12 FGDs and 8/29 household in-depth interviews)

> *'Both private clinics and public hospitals have user fees. Patients have to pay user fees otherwise they cannot go to see a doctor... We must seek money from whatever sources we can ...'*
>
> (FGD of the females in KK)

6.7.2 Households' perception on exemptions

Every respondent in both quantitative and qualitative studies strongly confirmed that exemptions for general treatment of illness at public health providers were not possible. Patients had to pay user fees from their pocket. However, they knew that a child can get free immunization and a patient can get free treatment for some diseases which were particular events i.e., tuberculosis, leprosy, special operations for glaucoma and cleft palate.

> *'...no exemption at all because drugs came from government budget. We must pay. Health staff would ask money before they provided drugs to a patient.'*
>
> (Household in-depth interview, TAL5)

> *'How come? If people did not have money, how people could receive health care. It was not possible that hospital will provide exemptions for the poor.'*
>
> (Household in-depth interview, KK2)

Qualitative information in SPX provided a better understanding from the people's perspective on why nobody had known about exemptions. Data came from an *ad-hoc* interview with the village head and the VHV in SPX who had known about the exemptions. They had been informed that exemptions was for '*Phu-Anatha*' (a destitute person), not for '*Phu-Thukyak*'(a poor person). The village head had been given this information at a meeting at the district government when he first came to be the village head of SPX in 1997. The VHV had been informed when he was trained to be a health volunteer by the district health office in 2002. They said every participant of the same meeting had the same understanding. The VHV indicated that a trainer said there was a ceiling on the exemptions of 1 USD per visit; otherwise the village RDF might face financial problems. The village head and the VHV interpreted that households in the village were poor but not destitute. That information led them to infer that no one in the village was eligible for exemptions at public providers and so they did not inform the village members about possible exemptions. The village head and the VHV were reminded about the exemptions for the destitute again by the District Health Office in 2003. This time they had informed the villagers in a meeting but it seemed that no one paid any attention to this issue. The VHV reported his

experience that he had never given exemptions to any villager since the RDF was available in the village in 16 August 2002. Likewise, no villager had asked for free medicine from him. Some villagers had postponed payment to him and all of them could repay anyway. The village head and the VHV further elucidated that the terminology of 'a poor person' and 'a destitute person' was introduced by the government staff. Both of them had to keep strictly to the definitions and nobody could change them except the government. The village head and the VHV could clearly define the difference between 'a poor person' and 'a destitute person', that a poor person has a better situation than a destitute one.

- 'A poor person' means someone who has not enough money but still has relatives or assets such as a house, rice field, poultry, pigs or livestock.
- 'A destitute person' means someone who has absolutely nothing i.e., no money, relative or asset.

Additionally, all three focus group discussions in SPX had the same idea that households in the village were poor, not destitute. The FGD of village committees explained that there were many destitute people after the year of independence (1975). The last destitute person in this area had died two years ago. Presently, everyone in the village has at least one of three items; house, kin and asset. Therefore, there is no destitute in the village and in the area.

6.8 Discussion

6.8.1 Discussion of methodology

Households for in-depth interview were purposively selected based on experience of illness or admission or death obtained from the village census and allocation to wealth group by the FGDs. The selected households were asked for their willingness to participate in the study and none of them declined. A schedule of in-depth interviews was arranged later through the village head or the local assistant. The schedule was publicly known by the villagers. Many neighbours came to observe the in-depth interview in the first few households because other selected households wanted to know beforehand what questions would be asked. When someone outside the selected household members was present at the in-depth interview, there were advantages and disadvantages. For some selected households, participation of other neighbours benefited the in-depth interview. For example, the neighbours provided a friendlier environment, especially for respondents who were very shy. Frequently, the neighbours helped in verifying data for the household members, especially times and dates. Nevertheless, sometimes, the selected household members were reluctant to say some feelings or personal reasons in front of their neighbours, for instance reason for not asking for a delayed payment. If the researcher discerned their reluctance, she skipped that question and then found out later e.g. asked the household members again later when their neighbours had left or obtained the information in other ways. For one household, a neighbour interfered in the interview. He answered the questions before the respondents and forced the respondents to quickly respond. He was gently requested by the researcher to stop getting involved in the interview by quietly thinking of his own answer which would be the next in-depth interview. The village head stressed the request to him.

In the village census, although the villagers adopted delayed payment as a coping strategy, they did not want it recorded as such if they had repaid already. It was rather referred to as another coping mechanism, such as earning money from e.g. selling assets and using savings. For example, a household head delayed payment to a private provider. At the interview date, he had repaid already by his saving which he earned from many activities e.g. fishing or fetching natural products. In this case, the coping

mechanism was recorded as using saving. Income diversification was not mentioned as a cost management strategy because it was perceived as consequences of needing to find the cost of the health care. Extra jobs were done in order to generate additional income for many purposes such as (1) to repay a borrowing or (2) to repay a delayed payment or (3) to buy poultry to replace the one which had been sold or (4) to replace savings which had been used.

A threshold of catastrophic expenditure when health expenditure is equal to or greater than 10% of a household's income has been applied in many studies (Russell 2001; Russell and Gilson 2006; Chuma et al. 2007). A cut-off point of 40% or more of household non-food consumption which was proposed by WHO (2005) and used in other studies (Xu et al. 2007; Xu et al. 2003) was adopted in this study because it is more sensible for measuring a catastrophic level in a low-income setting which normally has a high share of food consumption. For example, in table 6.6, if the catastrophe threshold was based on 10% of household consumption, health expenditure of 10 units would cause catastrophe for all households regardless of the profile of food and non-food consumption. Health expenditure of less than 10 units would not lead to catastrophe for any household. If a cut-off point of 40% of non-food consumption is applied, the profile of food and non-food consumption is significant for whether or not expenditure is catastrophic. Health expenditure of 10 units could lead to catastrophe for households 1 – 5 (food consumption of 75% - 95%), but not for others. Health expenditure less than 10 units could result in catastrophe for households with food consumption greater than 75%. When food consumption equals 75%, whether a cut-off point of 10% household consumption or 40% non-food consumption is employed, the judgement on catastrophic expenditure would be the same.

Table 6.6 Illustration of the sensitivity of catastrophic health expenditure to its definition

HH no.	Household consumption	Food consumption	Non-food consumption	Catastrophic level when health expenditure is 10 units: Based on HH consumption	Catastrophic level when health expenditure is 10 units: Based on non-food consumption	Health expenditure which leads to catastrophe, if based on 40% of non-food consumption
[A]	[B]	[C]	[D]	[E] = 10/[B]	[F] = 10/[D]	[G] = 40% x [D]
1	100	95	5	10%	200%	2
2	100	90	10	10%	100%	4
3	100	85	15	10%	67%	6
4	100	80	20	10%	50%	8
5	100	75	25	10%	40%	10
6	100	70	30	10%	33%	12
7	100	65	35	10%	29%	14
8	100	60	40	10%	25%	16
9	100	55	45	10%	22%	18
10	100	50	50	10%	20%	20
11	100	45	55	10%	18%	22
12	100	40	60	10%	17%	24

The study found that non-food and food consumption of the four villages was 25% and 75%, respectively, as presented earlier in table 4.5. Considered by wealth group and by village, the middle group and the worst-off group of the four villages had lower levels of consumption and a higher proportion of food consumption than the better-off. There is a limitation of the methodology for obtaining household consumption in this study. Mean figures obtained from three sampled households were applied to other households in the same wealth group of the village. By doing this, every household of a wealth group had the same consumption per person per day and the same proportion of food and non-food consumption. So this was a rough approximation and would affect the accuracy of the numbers of households facing catastrophic expenditure.

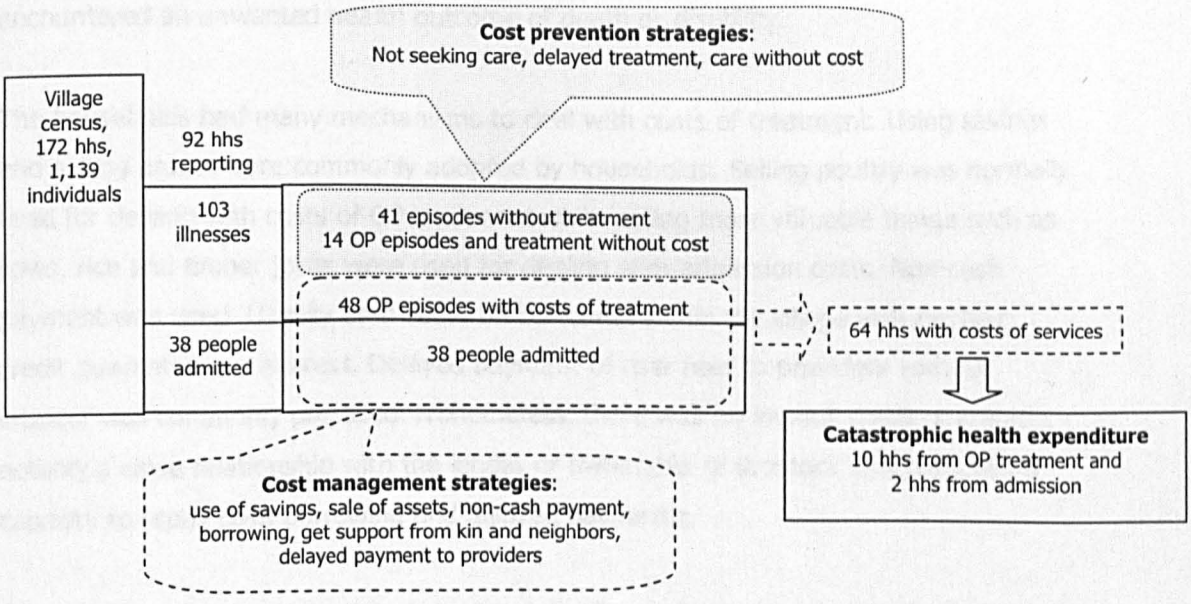
The measurement of catastrophic expenditure is inevitably crude and controversal. By applying a cut-off point of 40% non-food consumption, a total of 12 households had catastrophic expenditure. If a threshold of 10% of household consumption is applied, it would capture a total of 8 households with catastrophic expenditure. Nonetheless, catastrophic payments do not reflect the severity of household financial hardship (Wagstaff and Van Doorslaer 2003). Households facing catastrophic health expenditure

do not necessarily face impoverishment. It depends on the assets base, characteristics of each household member and other factors such as timing of health costs (Russell 2004; Van Damme et al. 2004). But employing such a definition of catastrophic cost could indicate the magnitude of the cost problem. Qualitative methods in this study could then be used to explore its implications for household welfare in greater depth.

6.8.2 Overview of findings

This chapter has presented the cost burden on households caused by paying for treatment, catastrophic health expenditure, coping strategies adopted by households to deal with costs of health services, and households' perception towards user fees and exemptions. A summary of main findings from the village census is shown in figure 6.1.

Figure 6.1 Summary of main findings from the household census



There were 64 households in total faced costs for OP treatment and admission. Among them, 12 households faced catastrophic levels of health expenditure (relative to the threshold of 40% of monthly household non-food consumption). The level of catastrophic health expenditure had a wide magnitude, from 43% to 1695%. The remote village in the poor district (TAL), especially the middle and the worst-off group in the village, had the greatest suffering from catastrophic health expenditure compared to the other three villages. Catastrophic health expenditure could be caused by either small or large amounts of health expenditure. The impact of catastrophic health expenditure on household livelihoods differed from household to household and was associated with the capacity of the household to cope with the crisis e.g. asset base, profile of household members and status of the sick person in the household. For

example catastrophic health expenditure at 1695% of monthly household non-food consumption neither affected short nor long term household livelihood in one household because it owned many assets and the sick person who was elderly was not a main labourer of the household.

When a household was faced with unexpected illness, cost prevention strategies by not seeking care and treatment cost management strategies were adopted. Not seeking care was the strategy used in many households, from the better-off to the worst-off. Unfortunately, four households who all adopted cost prevention of not seeking care encountered an unwanted health outcome of death or disability.

The households had many mechanisms to deal with costs of treatment. Using savings and selling assets were commonly adopted by households. Selling poultry was normally used for dealing with costs of OP treatment while selling more valuable things such as cows, rice and timber joists were used for dealing with admission costs. Non-cash payment was used. Usually cash could be borrowed within the village with neither credit guarantee nor interest. Delayed payment of user fees to providers without interest was commonly practised. Nonetheless, there was an implicit credit guarantee, notably a close relationship with the lender or ownership of livestock which implied a capacity to repay cash borrowing and delayed payments.

The villagers completely accepted the principle of user fees at public health care providers. They perceived that the patients had responsibility to pay user fees by whatever coping mechanisms they could possibly manage. Almost no villager knew about exemptions at public health providers. The few who knew understood that exemptions were for the destitute, not for the poor. They inferred that they were the poor and then not eligible for the exemptions. They also believed that exemptions were impossible.

6.8.3 Discussion of findings

Health care cost burden

The national survey of the LEC III did not provide analyzed data on health care cost burden to households so the study's findings on cost burden cannot be compared to the national figure. The Oudomxai survey did not present health care cost burden on households. Paphassarang et al (2002) reported that the high socio-economic group had a higher cost burden (2.0-6.5% of income per person per year) than the low socio-economic group (1.0-1.6% of income per person per year). This was in contrast with the findings of the thesis which found that the middle and the worst-off groups faced higher cost burdens. This was both because of their lower consumption as well as a higher proportion of food consumption than the better-off group, as shown in table 4.5. Among the four villages, TAL had the highest level of cost burden and the greatest number of households with catastrophic expenditure. There were many possible explanations. TAL had the highest proportion of food consumption (88% for middle group and 84% for the worst-off group) and its consumption was relatively low.

Neither the national survey nor the studies in Lao PDR presented evidence on catastrophic levels for Lao households. The thesis produced new findings in Lao PDR on catastrophic health expenditure. The thesis found that catastrophic health expenditure was related to treatment choice. Seeking care from local facilities was normally cheap but, sometimes, it could be an expensive or even catastrophic expense if the villagers adopted the traditional practice of *Heet*. This event was adopted only among the *Lao Theung,* not the *Lao Lum.* Two households in TAL and one household in KY village, all *Lao Theung,* applied it and the two households in TAL as a consequence were faced with catastrophic expenses (at 1695% and 354%) but not the one household in KY (34% of monthly household non-food consumption). This evidence suggests that different ethnic groups have different traditional beliefs and practices to relieve illness which might be significant for health seeking patterns, health care costs and health outcomes. Within the three main ethnic groups in Lao, it is commonly accepted that *Lao Lum* (low land) is the better-off group, *Lao Theung* (mid land) is the middle group and *Lao Sung* (high land) is the worst-off in terms of economics, access to infrastructure and access to social welfare and public health services. *Lao Sung* has traditional beliefs similar to or possibly more extreme than

those of *Lao Theung*. Taking together the traditional beliefs and more severe geographical barriers, it can be predicted that *Lao Sung* may have a traditional ceremony which incurs high costs similar to *Heet*.

Costs of health service at public providers were high, especially compared to the low consumption level of households. The findings from Household TAL 8 (Box 6.3) indicated that user fees at public providers (12 USD at the district hospital plus 318 USD at the provincial hospital) caused catastrophic health expenditure to the household, especially expensive treatment at the provincial hospital. In this case, the household characteristics did not have good capacity to buffer health expenditure (this was a worst-off household) but main reasons for catastrophe expenses were treatment choices. The patient was in the remote area and he had limited choice of care. Several treatment options were applied including *Heet*. When he reached the public providers, his condition was worse – ruptured appendix - and he was referred to the provincial hospital. If the villagers were well educated that *Heet* could not cure the disease, *Heet*'s expense would be saved. If he could reach the district hospital earlier with a less serious condition, he might have been cured at the district hospital with lower user fees and transportation costs than the provincial hospital. The household might have been able to avoid catastrophic expenses.

The findings showed that low levels of treatment costs (1.65 USD) could cause catastrophic expenses to a household, as seen in Cambodia (Van Damme 2004). The thesis found in a household in-depth interview of TAL 7 (Box 6.1) that the illness cost was incurred by a simple treatment choice (a private practitioner) without transportation cost. Referring to an average cost of OP treatment as presented earlier; the level of 1.65 USD was about an average OP treatment cost by private providers (1.7 USD per OP visit) and it was the cheapest amongst facilities. Hence, main reasons for catastrophic expenses for this household were not from the treatment choice, but from the household characteristics themselves. This household was ranked by all three FGDs in the village as the worst-off household among the worst-off group in TAL. The household was selected for the consumption survey and its consumption was lower than the average of the worst-off group in TAL. This indicated that this household was extremely poor. When household members were ill (even with a not serious condition)

and the household had to shoulder treatment costs, it was difficult to avoid catastrophic expenses.

The thesis found that the cost burden differed considerably according to wealth group. The poorer the group, the higher the median cost burden. This is evident not only in Lao PDR but also in many other settings e.g. Vietnam (Sepehri et al. 2003) and Kenya (Chuma 2007).

A case of death was selected for in-depth interview. The study focused on health expenditure, but not funeral expenses but during the interview period, the respondents provided some information about the funeral event and expenses. Social status and age of the dead person were major factors influencing the funeral expense. The funeral of a baby or young person would be simple and less costly but the funeral of a person who had high social status (e.g. elderly, well-known person) would be expensive. The funeral expenditures were roughly estimated by far more expensive than health expenditure so possibly led to financial hardship for the household. Nevertheless, it was not the major concern of the study.

Coping strategies to deal with costs of illness

Cost prevention by not seeking treatment was used in the Lao villages. Unfortunately, information from in-depth interviews suggested that four households who adopted not seeking care had resulted in the worst possible outcome such as disability or death. This can be counted as a 'catastrophic health outcome' to the household, especially for curable diseases, which is equally, or possibly more serious than catastrophic health expenditure. In other words, lack of access to adequate health services by households could lead to a catastrophic health outcome and could have economic consequences (Wagstaff 2007b).

Costs of OP treatment were easier to manage than costs of admission. Using savings was typically adopted as a coping mechanism. Non-cash payment was also accepted in Lao. Generally it involved giving assets such as rice as payment; no-one reported payment by casual labour which is accepted in other settings (Chuma 2007). The social network established within the village, used for selling assets and borrowing cash, was important in meeting health expenditure and has been identified elsewhere (Sauerborn

et al. 1996; Russell 2001; Chuma 2007). The strength of the village in Lao is that loans could be made without credit guarantees and without interest, as with the informal credit system in China (Wilkes et al. 1998). In contrast, borrowing in order to meet health care costs in other countries is considered as a commercial transaction and interest is charged, e.g. Vietnam (Sepehri et al. 2003), Cambodia (Van Damme et al. 2004) and formal credit in China (Wilkes et al. 1998). Delaying payment was commonly used in Lao and in other settings (Chuma 2007). In the Lao context, no credit guarantee or interest were required unlike in Cambodia where the patient had to pay more for the same service when credit was given (Van Damme et al. 2004).

The thesis found that no household experienced reducing basic needs e.g. consumption or schooling. It might be because the villagers normally consumed wild products which could be fetched in the forest. All children were in a primary school and they could attend the school with low cost or without cost. Teenagers who were in a secondary school or a university which might incur high expense to the household were not captured as samples in the study.

The mechanisms adopted by the household were reactions to health care costs at that time. They could not reflect long term consequences nor was it possible to observe changes in livelihood. Nonetheless, information from in-depth interviews did demonstrate some impacts on the household, for example; a household had debts from admission or the household needed to earn cash in order to repay a delayed payment.

Perception on exemptions

The villagers perceived that money was necessary for seeking care and lack of money was not perceived as the main barrier to accessing health services. This implied that they did not expect free care from the providers and were not aware of the exemptions at public providers. It indicated that exemption did not function well as indicated by Gilson et al (1995) and it was reported as the case in Lao PDR (Paphassarang et al. 2002) and in Vietnam (Sepehri et al. 2003). This study adds to evidence of why an exemption policy might be unsuccessful. Exemptions were not taken up in the Lao villages because the villagers lacked knowledge about exemption and the villagers who knew were unaware of the entitlement to exemptions. The

villagers had clear definitions between the poor and the destitute and they got these concepts from government staff. These definitions affected the knowledge, attitude and practice of the villagers on exemptions. The villagers totally accepted that the destitute would get 'the money exemptions' (or waiving from paying user fees) but the poor would get 'the time exemptions' (or a delayed payment), not money. They did appreciate the time exemptions they got from the providers. They did prefer to preserve the money exemption for the destitute who rarely existed in this era. This emphasises that the households' perspective is a key factor in the successful implementation of an exemption policy, in addition to factors such as the policy itself, policy makers, providers (Gilson et al. 1995) and stigmatisation of the household (Gilson et al. 1998).

6.9 Concluding remarks

A combination of multiple methods from quantitative and qualitative approaches i.e., a village census, a consumption survey, key informant interviews, focus group discussions including wealth ranking, household in-depth interviews complemented each other well and made it feasible to identify household catastrophic health expenditure and to gain in-depth understanding on the household impact of illness.

Within the current context of the health delivery system, the villagers suffered from illness. Some of them were not able to access health services when needed and then faced a negative outcome of death or disability. The households were confronted with high cost burdens and some were catastrophic. Most catastrophic expenditure was concentrated in the poor district, especially in the most disadvantaged village and the middle and the worst-off group. The poorer households were more vulnerable to catastrophic health expenditure due to a low level of consumption and a very high proportion on food. Catastrophic health expenditure could be caused by many types of services, for instance, a small amount of service costs at a private provider, an expensive *Heet*, and a costly service at public providers, particularly a provincial hospital. Expenditure defined as catastrophic might not always result in negative consequences to the households.

The households dealt the cost of health services themselves drawing on a strong social network in the village. The villagers were not aware of the exemptions. On the other hand, they strongly accepted a concept of paying user fees at point of services. Lack of knowledge on exemption, misunderstanding on entitlement and lack of awareness of the exemptions were main factors from the households' perspective which inhibited the success of exemption policy implementation. A delicate issue on the definition of who was entitled to exemptions was found from the households' perspective.

This household information demonstrates that the exemption policy was not effectively implemented at all. The user fees at public health providers caused household catastrophic health expenditure and impoverishment for some. The current health delivery system did not enable the villagers to get proper access to health services when needed, in particular to public health providers.

CHAPTER 7
USER FEE AND EXEMPTION POLICY IMPLEMENTATION

7.1 Introduction

This chapter describes the implementation of the national policy on user fees and exemptions (known as Decree 52 PM) from the viewpoint of policy makers and providers at all levels of the country (central hospitals in Vientiane Capital, a provincial hospital, district hospitals and health centres) using both quantitative and qualitative research methods. The chapter mainly responds to objectives 4 and 5 (to assess public health care providers' behaviour and attitudes on exemption mechanisms and to assess the perceptions and preferences of national policy makers on fee exemptions policy and implementation). A short methodology is presented in the next section followed by the results, which form the main section of the chapter. The results section is divided into two sub-sections. The first is user fees and exemptions policy in Lao PDR which demonstrates the context of user fees before the launching of the policy in 1995 and the content of the policy. The second is the implementation of the policy which covers the process of implementation and routine practices of providers. The attitudes of policy makers and providers towards user fees and exemptions are presented. Discussion of methodology, an overview of the findings, discussion of findings and concluding remarks are presented subsequently, in the last part of the chapter.

7.2 Methodology

Data were obtained from policy makers and public health care providers using both quantitative and qualitative research methods.

Key informant interviews with a semi-structured questionnaire were used to obtain data from selected policy makers. A total of 22 policy makers (PMK1 – PMK22) were interviewed; 15 in the Ministry of Health, 3 in the Ministry of Finance, 2 in the School of Public Health, 1 in the Poverty Reduction Fund and 1 independent consultant for WHO in Lao PDR (table 7.1).

Time constraint, budget limitation and safety of travelling were considered in making the selection of sampled providers. A total of 15 health facilities (PVD1 – PVD15) in both Vientiane Capital (VTE Capital) and Savannakhet (SVK) Province were chosen for interview. These comprised 5 facilities at provincial level, 7 facilities at district level and 3 groups of facilities at village level (table 7.1). Each provider was visited and then health staff were interviewed using a semi-structured questionnaire, except head of some health centres who were interviewed at the district hospitals. In addition, the financial report of each interviewed provider was requested. The financial report of SVK Provincial Health Office was very useful as it presented data of all 14 hospitals in SVK province (all 14 district hospitals and SVK provincial hospital).

Table 7.1 Code and summary data of policy makers and providers including methods used

		Place		Method	
Code	**Organization**	**VTE Capital**	**SVK Province**	**Quantitative** (financial report)	**Qualitative** (interview)
Policy makers					
PMK1 – PMK15	Ministry of Health	/			/
PMK16 – PMK17	School of Public Health	/			/
PMK18 – PMK20	Ministry of Finance	/			/
PMK21	Poverty Reduction Fund	/			/
PMK22	Independent consultant of WHO, Lao PDR	/			/
Providers					
PVD1 – PVD3	Provincial level	/		/	/
PVD4	Provincial level		/	/*	/
PVD5	Provincial level		/	/	/
PVD6 – PVD8	District Hospital in poor districts		/	/	/
PVD9 – PVD12	District Hospital in non-poor districts		/	/	/
PVD13	4 Health Centres in a poor district		/	/	/
PVD14	3 Health Centres in a non-poor district		/	/	/
PVD15	7 Health Centres in another non-poor district		/	/	/

Note: * means financial report in a format of the SVK Provincial Health Office presenting data of all hospitals in SVK (a provincial hospital and 14 district hospitals)

7.3 The context and content of user fee and exemption policy in Lao PDR

7.3.1 The context of systems of user fees in Lao PDR before 1995

The history of the user fee system in Lao PDR can be divided into three periods. Firstly, between 1975 and 1986, after the liberation of the country on 2nd December 1975, the government reunified the nation under one party and management systems were centralized. Health care services were provided free of charge. Drugs and medical supplies were supported by socialist countries, in particular the former USSR, Vietnam and China. Some hospitals got sufficient (or more than enough in some areas) support for hospital services while others did not.

> *'At that time, we got an ambulance from the former USSR and a lot of medicines from China, the former USSR and Vietnam. We were frightened by the many large packs of medicines... there were too much. We were not able to use them all.'* (PVD6)

> *'...support was not adequate. Some patients had to buy drugs at drug stores outside the hospital when those items were not available in the hospital.'* (PVD5)

Secondly, since 1986, the government adopted a policy of the New Economic Mechanism. It moved economic activity away from a central command system towards a market-based approach. The private sector was allowed to have an active role in the socio-economic development of the country. There was a paradigm shift from a subsistence economy to a government-regulated market economy. In the meantime, the provinces became increasingly responsible for raising revenue for the various services they provided, such as health and schooling (Evans 2002). As a by-product of economic reform, the Ministry of Health endorsed the National Drug Policy in March 1993 (Paphassarang et al. 1995). The context of the new government direction on the market economy and diminishing assistance from comrade countries resulted in insufficient drug supplies and government budget constraints.

'Between 1985 and 1995, drugs from donations and government could only cover 3-4 months a year and, the rest of the time, patients had to buy drugs outside the hospital.'(PVD1).

Subsequently, the concept of a cost-recovery system in terms of a 'Revolving Drug Fund' (RDF) was adopted. It was influenced by international contexts such as Health for All, the Bamako initiative, as well as other support e.g., financial support in 1994 from the Nippon Foundation (known as Sasakawa) through UNICEF Lao PDR and technical support from an independent consultant of WHO Lao PDR (PMK22). Many policy makers and providers considered that the RDF was the first step towards establishing a cost-recovery system in the Lao health system. The RDF had shifted the practice of buying drugs from outside the hospital to inside the hospital and had benefits for patients and public health facilities: patients could conveniently buy drugs while public health facilities earned money and had reduced financial constraints. The RDFs were established in public facilities at different starting points from facility to facility.

'Drugs were inadequate especially IV infusion. Patients had to buy outside the hospital. It was a very difficult situation in particular at night. So we had initially created a 'drug fund' in the hospital in 1990 by collecting money from health staff. It was set up by us according to our own ability. We got an idea from tour studies in Vientiane Capital and Thailand. It was like a cooperative system.'(PVD9)

'Patients started paying for drugs in the hospital around 1987-1988. We got some amount of financial support from 'Primary Health Care Project' and we borrowed 30 USD (or 300,000 kip) from the District Bank in order to establish a 'Revolving Drug Fund' for the hospital and 4 health centres.'(PVD11)

Nevertheless, almost all providers complained about the negative effects of economic reform which promoted the self-reliance system. Public health facilities were forced to rely on their own financial management capacities and had to solve difficulties themselves while government ensured staff salaries.

'We got a lot of complaints from patients. We explained to them, everyday, that the RDF was not 'selling drugs'. Unlike selling-buying in the market, it was a public service and was not profitable. Its main purpose was for 'replenishment'. Patients paid for drugs and then the next patient could have drugs as well. We had to think of how to explain this to the patients ourselves: no-one helped us'. (PVD10)

Even though the government had a policy direction of providing free care to patients during 1986-1995, patients still had to contribute to the health system in at least one of the following ways; (1) buying drugs outside public facilities, (2) paying user fees for drugs in public facilities through a RDF, (3) providing a non-cash contribution, e.g. villagers gave 21 kg of rice every month to the health staff instead of salary paid by the government (PMK3) and sometimes villagers contributed timber and labour for constructing public health facilities (6 PMK and 1 PVD). This led to an easy acceptance of Decree 52 PM in 1995. When it was endorsed and had been implemented, nobody in the health sector spoke explicitly against the policy.

7.3.2 The content of the user fee and exemption policy (Decree 52 PM)

The national policy on user fees and exemptions was officially endorsed on 26 June 1995 by the Prime Minister (Lao PDR 1995). It has been widely known as Decree 52 PM, indicating its place in the sequence of officially endorsed decrees in Lao PDR. Decree 52 PM was published in Lao (Appendix IV), but not in English. An unofficial English translation has been done by the researcher for the purpose of this study only (Appendix V).

No section in the decree described its overall objective and the specific purpose of raising user fees in public health care facilities. No definition of user fees was provided. Some items of service and levels of provider were specifically liable for charges. Guidelines for using revenue generated from user fees were briefly described. The policy recognized that some groups should be exempted from paying user fees (government employees' spouse & children, pensioners, students, monks and the poor or the low income groups). However, neither eligibility criteria nor guidelines for identifying the poor or the low income groups were indicated, just an attestation affirmed by an authorized person. Facilities that had provided exemptions would receive subsidization by the government. Details are shown in table 7.2.

Apart from Decree 52 PM, the Ministry of Health launched an instruction for implementation of the policy which is Instruction 2635 MOH, approved by the Ministry of Health on 12 December 1995 (MOH 1995). Document review reveals that the contents of Instruction 2635 MOH almost exactly repeated Decree 52 PM. There were no further indications of the criteria to be used for identifying the poor.

Table 7.2 Main contents of Decree 52 PM

Topic	Contents of Decree 52 PM
Objective of the decree	Not specified
Definition of user fee	Not defined
Promulgation of the policy	*Article 15*: Ministry of Health and Ministry of Labour and Social Welfare were responsible for promulgation of this policy and distributing direction on implementation to health facilities, Provincial Health Office, Department of Labour and Social Welfare at Provincial level and grassroots.
Items of services liable for charges	*Article 6*: There were seven items in central hospitals, provincial hospitals and district hospitals [1. medical records and other documents, 2. supplies, 3. laboratory, radiology and other diagnostics, 4. medicine, 5. medical appliances, 6. curative cost (surgery, rehabilitation, acupuncture), 7. room and board] *Article 8:* user charges at health centre exclude charges for diagnostics and admission. Only a charge for medicine is permitted
The use of revenue generated from user fees	*Article 14*: 20% of the revenue from items 3 and 6 shall be remitted to general revenue of the government. The rest of the revenue can be used by hospitals at their discretion, and if the revenue is inadequate, the government will subsidize accordingly.
Exemptions from paying user fees	*Article 1*: Government employees and pensioners are entitled to free care. Hospitals are reimbursed by the Social Security Department, Ministry of Labour and Social Welfare (MOLSW) on a fee for service basis. *Article 2*: Government employees' spouses and children are entitled to free care. *Article 3*: Students, monks and the poor or the low income groups are exempt from user fees.
Who has to pay user fees	*Article 4*: Citizens who are not covered by Article 1, 2 or 3, must pay in full themselves.
Exemptions for the poor: how to identify the poor	*Article 10*: For a low income person, the hospital can accept affirmation by MOLSW, Social Welfare Provincial Office or the village head.
Subsidization for the exemptions	*Article 13*: The Ministry of Finance will allocate budget to subsidize hospitals who give free care to government employees' spouses and children (Article 2) and students, monks and the poor (Article 3). The Ministry of Health will propose the annual budget to the Ministry of Finance.

7.4 The user fee and exemption policy (Decree 52 PM) in practice

7.4.1 Promulgation of Decree 52 PM

Five policy makers in MOH (PMK1, 2, 7, 12 and 13) who were directly involved in the policy formulation and implementation in 1995 described the promulgation process. The Decree 52 PM document was introduced to representatives of Provincial Health Offices throughout the country in a meeting at VTE Capital. This was a regular meeting of the Provincial Health Officers and Decree 52 PM was an additional agenda item, not the main focus of the meeting. There was no particular meeting or specific channel or specific budget support for the promulgation of Decree 52 PM, which was common for any decree. Generally, the most relevant ministry to the Decree would promulgate by distributing (verbally and/or document) to provincial levels and then further expanding to district levels and then spreading out to village levels and finally to people.

The question of how the facilities got to know about Decree 52 PM was asked to all persons who held high position in public health facilities at provincial and district levels. All of them had been working in public health facilities since before 1995. All interviewees confirmed that neither training nor a particular meeting had been arranged for promulgating the policy. They all had heard about Decree 52 and received the document at a meeting at the provincial level, except interviewees of one district hospital (PVD7) who had heard about the decree but had never seen the document. Both of them said the director of the district health office might have the document. This coincided with the PVD11 view that only the most senior person in the health facility would see the document. Many practitioners might know the words '*Siakad* and '*Bor Siakad* in Lao or 'user charge' and 'exemptions' but would not understand the details. The majority of interviewees at district level said that they could receive information about Decree 52 from two channels; the provincial health office and the local governors. Interviewees were not asked about Instruction 2635. Interviewees from two facilities (PVD2 and PVD5) spontaneously mentioned it. They complained that they had had to find this instruction themselves and it was no clearer than Decree 52.

All interviewees at district level, except PVD7, had promulgated the policy by intermittently informing health centres, VHV and/or village heads. However, most of the interviewees thought that the audiences might not understand for a number of reasons such as: there were too many issues to talk about in a meeting and Decree 52 PM might be not a major concern from the village heads' point of view. However, staff of one district hospital believed that people understood more or less because some patients had requested exemptions from the hospital by showing attestation affirmed by the village head.

> *'We informed village heads but only from a quick reading of headings and main topics, not in detail because there were too many urgent issues for one meeting. In addition, village heads would focus on the high priority issues related to their routine life. We could not guarantee that the village heads would inform villagers. Even if the village heads had informed their members, I was not sure that the villagers would understand it. Some health staff still had not known about it or understood it until today.'* (PVD6)

The same question of knowing about Decree 52 PM was put to the head of 14 health centres (PVD13, 14 and 15). About half of them had been working in public health facilities since before 1995. All of them had heard about user fees and exemptions but had never seen the document of the decree and did not know any details about it, except one of them who had worked in the district health office before moving to the health centre. He understood and could explain the main content of the decree. Furthermore, all of them said they had not informed village heads or villagers about the exemptions policy.

7.4.2 Expectation and implementation of Decree 52 PM

All policy makers in MOH and providers perceived that Decree 52 was a legal framework on user fees functioning in public health facilities in particular on the implementation of the RDF. They had foreseen that Decree 52 PM would facilitate provision of health services by public health providers.

> *'The most important aspect of the decree was that public hospitals could maintain and extend public services. It would yield positive results for the bottom level and central levels.'*(PMK5).

> *It was practical and useful for the RDF. It was like a guarantee to the private drug companies when we signed contract with them in order to receive drugs into RDF stock and pay them later.'*(PVD2)

Policy makers in MOH were concerned about problems of implementation at health facilities. They expected that each facility would be self-reliant or *'Khum Ton-Eang'*in Lao. At the same time, providers at provincial and district levels also believed that they had to be self-reliant. Importantly, they perceived self-reliance was necessary not only for the implementation of Decree 52 PM but also for all other issues e.g., hospital administration and financial management, which will be discussed in a later section. All of them said they had had to interpret, implement and monitor the decree and solve all problems themselves.

> *'We had to carry it out according to our own perception and understanding without any clarification or explanation from anyone.'*(PVD6)

> *'We had neither guidance nor training; we had to solve problems ourselves. We listened to complaints from patients and tried to find solutions every three months.'*(PVD10)

7.4.3 Fee schedule

It was clearly indicated in the decree that user fees would be charged for seven items of services in hospitals but only charges for medicines were permitted in health centres. However, neither a standard fee structure nor any guideline for setting up or updating fees was included even in Instruction 2635 MOH, except that for medicines by the RDF rule – mark up at 25% of the buying price at all levels. Respondents in health facilities (PVD 2-3, 5-12) consistently provided practical features of fees as follows;

- All interviewees perceived that 'the fee schedule was not universal and there was no standard fee level'. It depended on the individual hospital.
- Fees were set by staff who were directly involved in that service, e.g. a laboratory department would be in charge of setting fees for laboratory tests.
- Fee levels had been influenced by many factors including: cost of ingredients, transportation costs, inflation rate (which had an indirect effect on ingredient costs and transportation costs) and acceptability to people. Basically, every hospital compared its own fees to other hospitals both at the same level and higher levels.
- There was no regular timetable for updating fees. It depended very much on the economic situation and the feasibility of implementation.
- According to government regulation, any fee schedule needed approval by a local governor before implementation. In practice, the local government rarely intervened on the fee level or made an objection to the fee level proposed by the hospital.
- In some cases, hospitals made an adjustment after implementation of the fee level due to a long list of grievances by patients and/or staff, for example:

> *'The charge for admission was set at 0.8 USD (or 8,000 kip) per night in 2005 when we operated an in-patient ward in a new building. We never charged for an admission before because we had very old facilities (in-patient ward in an old wooden building). Many people could not accept the fee rate: there were a lot of complaints to our staff and then two or three months later we reduced the fee to 0.5 USD (or 5,000 kip) per night.'*(PVD9)

The practice described above resulted in a wide range of fee levels for the same service among the same level of health facilities as shown in table 7.3 and table 7.4.

Table 7.3 Fee schedules of seven district hospitals in SVK Province

	PVD6	PVD7	PVD8	PVD9	PVD10	PVD11	PVD12
OP registration	0	0.3	0.5	0.2	0.2	0.5	0
IP Nursing document	0.5	0.3	0.3	0.5	0.5	0.5	0.5
Drug mark up	20%	15-20%	30%	25%	20%	20-25%	25%
Malaria film	0.5	0.3	0.6	0.4	0.4	0.3	0.5
Complete blood count	1.5	0.3	0.4	0.6	0.9	0.5	0.6
Blood grouping	0.5	NA	0.4	0.7	0.35	0.5	0.5
Stool exam (KOPA)	0.5	0.3	0.5	0.4	0.3	0.5	0.5
x-ray	NA	NA	Small 2.5 Large 3.0	NA	3	2.0-2.5	NA
Ultra-sonogram	3.2	NA	3	2.5	NA	2	NA
IP admission-normal bed	0	0	0.5	0.5	0	0.5	0
IP admission-Special room	2.5	NA	1	4	NA	0.7-1.0	NA
ANC per visit	0.5	0.3	0.5	0.2	0.6	0.8	0.7
EPI	0	0	0	0	0	0	0

Note: Data as of June 2006
Currency in USD (1 USD approximately 10,000 Kip)
NA means the service is not available in the health facility.

Table 7.4 Fee schedules of nine health centres in SVK Province

Health centre (HC)	HC1	HC2	HC3	HC4	HC5	HC6	HC7	HC8	HC9
OP registration	0	0	0.2**	0	0	0	0	0	0
IP Nursing document	0.3	NA	NA	NA	NA	NA	NA	NA	NA
Drug	20%	25-30%*	30%	20%	30%	20%	30%	30%	30%
Malaria film	0.5	0.5	0.15	0	NA	NA	NA	NA	NA
Stool exam (KOPA)	0.5	0.5	0.15	NA	NA	NA	NA	NA	NA
Normal bed	0	0	0	0	0	0	0	0	0
ANC	0	0	0	0.2	0	0.1	0.1	0	0.1
EPI	0	0	0	0	0	0	0	0	0

Note: Data as of June 2006
Currency in USD (1 USD approximately 10,000 Kip)
NA means the service is not available in the health facility.
HC1 and HC2 were in Phine District (the poor district) and HC3-HC9 were in APT district (the non-poor district).
* Drug prices in HC2 were charged at a higher margin than HC1 in the same district because it was for salary of two health volunteers in the health centre.
** OP registration was charged to patients outside the catchment area of health centre.

7.4.4 Role and profile of revenue generated from user fees in providers

Secondary financial data from all hospitals in SVK Province (1 provincial hospital and 14 district hospitals) were retrieved from the Financial Department of SVK Provincial Health Office (PVD4). Evidence showed that revenues generated from user fees were a major source of income in the provincial hospital at an average of 65% of total hospital revenues during the fiscal years 2001-2005 (table 7.5) and about one third of total revenues in all 14 district hospitals during the fiscal years 2001-2005 (table 7.6).

Table 7.5 Revenue of SVK Provincial Hospital by sources of revenue

	Fiscal year					
Revenue sources	2001	2002	2003	2004	2005	2001-05
1. Government budget	28%	26%	24%	26%	28%	26%
2. Generated from user fees	65%	59%	72%	60%	68%	65%
3. Donors	7%	15%	5%	15%	4%	9%
Total	100%	100%	100%	100%	100%	100%
USD	301,445	458,997	560,727	672,185	586,659	2,580,014

According to sub-analysis by poor and non-poor districts (table 7.6), on average per hospital, a district hospital in the non-poor districts not only got higher total government subsidy but also had more capacity to raise user fees than those in the poor districts. The district hospitals in poor districts had a lower proportion of revenue from user fees (16% of total revenue) than those in non-poor districts (34%). Furthermore, the proportion of user fees to total hospital revenue in provincial and district hospitals was more or less stable during the five year period.

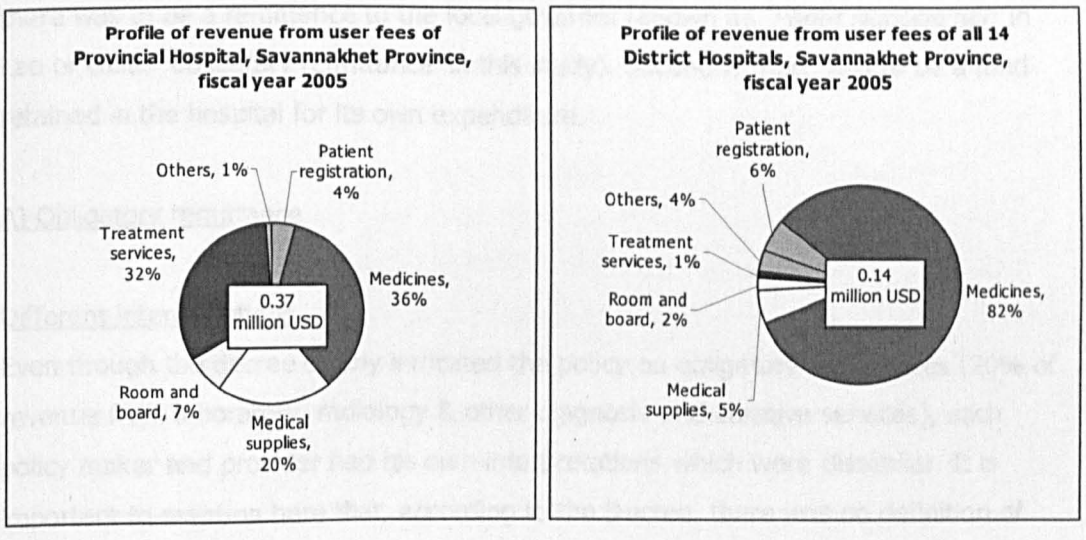
Using population as of September 2005, the government subsidized the district hospitals in the poor districts (0.66 USD per person per year) slightly more than those in the non-poor districts (0.55 USD per person per year). However, this higher government subsidy at 0.10 USD per person in 2005 could not compensate for a lower capacity to raise fees per person in the poor district. The poor district hospitals still had lower revenue at 0.74 USD per person in 2005 than those in the non-poor at 0.77 USD per person in 2005.

Table 7.6 Revenue of district hospitals in SVK Province by sources of revenue

Revenue sources	Fiscal year					
	2001	2002	2003	2004	2005	2001-05
All 14 district hospitals						
1. Government budget	64%	69%	66%	70%	75%	69%
2. Generated from user fees	36%	31%	34%	30%	25%	31%
Total	100%	100%	100%	100%	100%	100%
Total amount (million USD)	0.2579	0.3343	0.4038	0.4568	0.5479	2.0007
District hospitals in poor districts (4 district hospitals)						
1. Government budget	87%	82%	77%	86%	89%	84%
2. Generated from user fees	13%	18%	23%	14%	11%	16%
Total	100%	100%	100%	100%	100%	100%
Total amount (million USD)	0.0425	0.0672	0.0779	0.0793	0.1063	0.3731
Mean per poor district hospital						
• government budget per hospital (million USD)	0.0092	0.0137	0.0151	0.0169	0.0237	0.0786
• User fees per hospital (million USD)	0.0014	0.0031	0.0044	0.0029	0.0028	0.0146
Mean per capita in 2005						
• government budget per person (USD)					0.66	
• User fees per person (USD)					0.08	
District hospitals in non-poor districts (10 district hospitals)						
1. Government budget	60%	66%	63%	66%	71%	66%
2. Generated from user fees	40%	34%	37%	34%	29%	34%
Total	100%	100%	100%	100%	100%	100%
Total amount (million USD)	0.2154	0.2671	0.3259	0.3775	0.4417	1.6276
Mean per non-poor district hospital						
• government budget per hospital (million USD)	0.0128	0.0176	0.0206	0.0250	0.0314	0.1075
• User fees per hospital (million USD)	0.0087	0.0091	0.0120	0.0127	0.0127	0.0552
Mean per capita in 2005						
• government budget per person (USD)					0.55	
• User fees per person (USD)					0.22	

The same data set showed that, in the fiscal year 2005, revenue from medicines was the major part of revenue generated from user fees in both provincial hospital (36% of total revenue from user fees) and particularly district hospitals (82%) in SVK Province (figure 7.1).

Figure 7.1 Profile of revenue from user fees in provincial and 14 district hospitals, SVK Province, fiscal year 2005



However, this secondary data needs to be used cautiously. Interviews of providers revealed that one district hospital kept three sets of the financial reports particularly concerned with revenue from user fees: one was for submitting to the local governor (showing only 8 items of user fees for calculating the obligatory remittance), one was for sending to the PHO (showing only items specified in a designed template) and one was for internal hospital use. Another main concern was the accuracy of the data. Staff of one district hospital said they did not have a copy of the financial report. Sometimes, they just provided financial figures by phone when the PHO needed it (see detail on reporting system). Quantifying the magnitude of data error needed intricate and subtle approaches which had not been planned in this study.

7.4.5 Use of revenue generated from user fees

According to the Article 14 of Decree 52 PM, twenty per cent of the revenue from user fees for laboratory, radiology & other diagnosis and curative services must be remitted to the general revenue of the government and the rest of the revenue can be used by hospitals at their discretion, and if the revenue is inadequate, the government will subsidize as necessary. Revenue from user fees would be divided into two pots. Firstly, there was to be a remittance to the local governor (known as *'Panta Ngobpaman'* in Lao or called 'obligatory remittance' in this study). Secondly, there was to be a fund retained in the hospital for its own expenditure.

A) Obligatory remittance

Different interpretations

Even though the decree clearly indicated the policy on obligatory remittances (20% of revenue from laboratory, radiology & other diagnosis and curative services), each policy maker and provider had his own interpretations which were dissimilar. It is important to mention here that, according to the Decree, there was no definition of 'user fee' or '*Ray Rub Vichakan*' in Lao. Each policy maker and provider had a different understanding and interpretation of *Ray Rub Vichakan* which led to different interpretations of obligatory remittances. Two main interpretations of *Ray Rub Vichakan* were identified. One included all revenue generated from services related to patients (including RDF) and non-patients e.g. rent of a meeting room (PVD8), while the other excluded non-patient related services e.g. rent for motorcycle park (PVD5). Interpretations of the boundaries of RDF were also different. Small-sized district hospitals (PVD6, 7 and 10) interpreted RDF to include medicine and all reagents for laboratory and x-ray services whereas some large-sized district hospitals (PVD8, 9 and 11) and hospitals at provincial level (PVD2, 3 and 5) assumed that RDF was for medicines only and reagents for laboratory and radiology were separately managed. This very much depended on the size of the hospital and the complexity of hospital management. Because of different definitions of *Ray Rub Vichakan*, three policy makers (PMK2, 13 and 18) explained that hospitals had to remit 20% of revenue generated from all sources of *Ray Rub Vichakan,* including RDF to the government whereas three other policy makers (PMK1, 8 and 11) understood that revenue from

RDF need not be remitted to local government and that all revenue from RDF could be retained by the hospital. In addition, one policy maker (PMK2) strongly disagreed with the notion of 20% of the revenue. He argued that it should be 20% of the profit of the revenue generated from user fees.

Diversity of practice on obligatory remittance

The different interpretations of *Ray Rub Vichakan* and boundaries of RDF as mentioned above, together with differences in the financial arrangements established by each local governor, resulted in considerable variation in the practice of diverting revenue from user fees to local coffers. Secondary data from two hospitals at provincial level (PVD2 and 5) and 11 district hospitals (excluding incomplete data from 3 district hospitals) showed that obligatory remittances were, on average, 1-5% of the total revenue from user fees including the RDF, during the fiscal years 2001-2005 (table 7.7). District hospitals had twice as high a rate of obligatory remittances as hospitals at provincial level. Excluding revenue from the RDF from the calculation, obligatory remittance of 11 district hospitals was about 25% of the total user fee revenue from other services.

Based on interviews at two hospitals at provincial level and seven district hospitals, three features of obligatory remittances among these hospitals were identified. Firstly, the two provincial hospitals had to remit *20% of revenue generated from 3 specified items* negotiated with the provincial governor (detail in table 7.7). Secondly, one district hospital had to remit *20% of profit of all revenue generated from 8 items* approved by the local governor. However, the target amount of obligatory remittances had been set for the hospital at the beginning of the fiscal year. Thirdly, six district hospitals had to remit *a fixed amount* from the user fee revenue which had been assigned by the local governors at the beginning of the fiscal year.

Table 7.7 Obligatory remittances compared to total user fee revenues in the hospital and features of obligatory remittances

	Secondary data from financial report						Interview data on features of obligatory remittance in the FY 2005 (samples: two hospitals at provincial level and seven district hospitals)
Code	2001	2002	2003	2004	2005	Mean 2001-05	
PVD2	2.1% (19.4)	2.0% (24.1)	1.4% (34.2)	1.0% (33.8)	NA	1.2% (27.9)	20% of revenue from 3 items (registration, room & board and health check-up)
PVD5	2.3% (4.4)	2.2% (5.9)	1.8% (7.4)	2.3% (9.1)	2.3% (9.1)	2.2% (7.2)	20% of revenue from 3 items (ultrasound, echocardiogram and room & board)
11 DH	2.3% (1.4)	4.5% (4.7)	5.7% (7.8)	4.6% (6.4)	4.6% (6.4)	4.6% (5.3)	**One DH:** 20% of profit from 8 items (medicines, laboratory, x-ray, ultrasound, registration, rehabilitation, dental services and oxygen) **Six DH:** a fixed amount at the beginning of the year

Note: Figure in brackets shows amount of obligatory remittances in 1,000 USD.

All seven district hospitals consistently gave the same information on their practices. The district governor had been allocated a target of total obligatory remittances by the provincial governor and then the district governor assigned a target to each sector in the district according to its earning capacity. The target was agreed at a meeting of all sectors with the district governor at the beginning of the fiscal year. The target was negotiated during the meeting and could be adjusted during the year.

Pragmatically, the district hospitals used whatever sources of cash they had available in the hospital to remit to the district governors when they reached the deadline. It could be cash from either user fee revenue including RDF or government budget that the hospital received through the district governor[8].

> *'The hospital received a government budget for administration of about 12 million kip from the district governor but 3-4 days later we gave 9 million kip back to the district governor.'* (PVD6),

[8] A hospital received the government budget through the local governor with two main separate items. One was for salary and other benefits for hospital staff which was based on number and position of health staff in the budget plan. Another was for hospital administration e.g., electricity, water supply, gasoline, stationery costs etc. Some of it had been allocated from the government through the local government and some of it relied on the financial capacity of the local government. If so, how much the hospital would receive entirely depended on the final decision at the local level. Hospitals might or might not receive payment as indicated in the budget plan.

'We told the district governor to deduct the government budget from an allocation for hospital administration, and send us the balance. Sometimes the budget was not enough and we had to pay costs from whatever monies we could find.' (PVD8),

'We used all types of cash we had. The district governor was not concerned about the source of money.' (PVD9)

From the experience of seven district hospitals during the last three years (the fiscal years 2003-2005) shown in table 7.8, four district hospitals had reached or nearly reached the target of the obligatory remittance. One could only reach half of the target. One could remit 15% over the target. One had experience of both success and failure to reach the target. Neither of those who failed to reach the target had experienced a negative impact from the district governor to the hospital, though several providers thought failure might lead to delayed payment of the government budget. In fact on the contrary, one provider had had good experience of re-distribution of resources among sectors, which had high and low capacity to charge the user fees, in the district. Interestingly, two district hospitals had received appreciation certificates issued by the district governors when they exceeded the target. One had received a cash bonus regardless of target achievement. This was because the whole district had contributed beyond the target of the province so had received a bonus from the province. The director of the hospital said this system was applied to all levels; national, provincial and district levels.

Table 7.8 Achievement of remitting the obligatory remittance and attitude of hospital staff

	Experiences in the FY 2003-2005	Implication in the FY 2003-2005	Attitude on what impact if the target could not be reached
PVD6	2003-2005: reach the target	Nothing	1. Verbal criticism in the meeting 2. Delay in paying government budget of salary and administration
PVD7	2003-2005: reach the target	Nothing	No significant impact
PVD8	2003-2005: under the target (by half)	No criticism from the district governor and colleagues in the meeting and no negative implication, in contrast hospital got more administration budget. The district government re-allocated money among rich and poor sectors in the district.	No significant impact, just questions in the meeting
PVD9	2003-2005: reach the target	Nothing	1. Delay in paying government budget, in particular for administration
PVD10	2003-2005: reach the target	Nothing	No significant impact
PVD11	2003-2005: over the target (by 15%)	Received appreciation certificate from the district government	No significant impact
PVD12	2003, 2005: under the target (by half) 2004: over the target (by 13%)	2005: Received bonus in cash because the district could contribute over the target to the province 2004: Received three things in return; (1) bonus in cash about 12% of the target (2) applause in the meeting (3) appreciation certificate from the district governor	No significant impact

Attitudes of providers towards remitting obligatory remittance and its future

Based on interviews, all policy makers and providers at provincial and district levels expressed strong views on the obligation of the people to the government. They believed that every individual person and organization who earns income must pay a part of their revenue to the government treasury like tax. It was very common to hear from interviewees that *'everyone who has income must remit to the government. It is the policy of the government.'* Staff of the financial department of one district hospital gave a clear explanation that *'This obligatory remittance was to help the district governor. We (organization) like others who earn more should pay more tax in order to help each other to construct the country. It is our duty to remit to the government whatever amount of money we have.'* (PVD11)

All interviewees in each sampled hospital in SVK Province (1 provincial hospital and 7 district hospitals), except one district hospital, said that in theory they disagree with a concept of obligatory remittance All of them were asked on willingness to continue it in practice. The majority (5/8 hospitals) said that, in practice, they would prefer to continue the obligatory remittance. They were concerned about the limitations of government revenue, and conformity among all sectors in the district. In addition, some suggested remitting a percentage, not a fixed amount at the beginning of the fiscal year. A minority of them (3/8 hospitals) would prefer not to continue the obligatory remittance due to the financial constraints of the hospital. Their opinions and suggestions are displayed in table 7.9 below.

Table 7.9 Quotations from providers in SVK Province according to obligatory remittance in the future

Opinion	Hospitals	Quotation
Preferred to continue the obligatory remittance	PVD6 (poor DH)	*'To continue remitting but as much as we can: other organizations which had less revenue still had to remit so we must remit our revenue as well.'*
	PVD7 (poor DH)	*'All sectors had to remit. We also would like to remit to the district governor as much as we could. If we could not reach the target, we just informed them.'*
	PVD8 (poor DH)	*'Concerning the reality of the hospital situation, it would be practical to remit revenue to around 10-20% of profit from treatment services, excluding RDF otherwise the hospital could not survive. If we abolish an obligatory remittance, the government could not survive.'*
	PVD9 (non-poor DH)	*'Obligatory remittance is a responsibility to the country. We would prefer to remit revenue as a percentage, not a fixed amount. It should be 3% of revenue from laboratory and ultrasound only, and exclude RDF and other revenues.'*
	PVD12 (non-poor DH)	*'Have to remit even a tiny amount. Others [other sectors in the district] had to remit. It could not be waived for some and not others otherwise it would not be fair and might distort a universal system of the country.'*
Did not prefer to continue the obligatory remittance	PVD5 (PH)	*'Currently, the hospital has been facing serious budget constraints. We owed private drug companies about 500 million kip. The government should help us, not to levy money from us.'*
	PVD10 (non-poor DH)	*'This amount that we had to remit to the district governor should be retained in the hospital for our own use. It was not even enough for the administration of the hospital and it would only represent a tiny proportion of the district governor's income compared to other sectors.*
	PVD11 (non-poor DH)	*'Reality, we should not remit revenue from the hospital to the government. People come to see a doctor when they get sick: they do not come for business or trading purposes like in a market. Patients have to sacrifice their household money for treatment. The government should levy high tax from the entertainment sector e.g., restaurants, bars, pubs.'*

Note: PH stands for provincial hospital
Poor DH stands for district hospital in po or district.
Non-poor DH stands for district hospital in non-poor district.

Magnitude of obligatory remittance compared to total revenue of the government

Secondary data from the Department of State Treasury Protection, Ministry of Finance illustrates that obligatory remittances raised from fees by the Ministry of Health (including from public health facilities (user fees in hospitals) and non-public health facilities (fees from drug stores and private clinic)) was a small part of total administration fees of the country in the FY 2005 and 2006. Two major sources of Administration Fees (or obligatory remittance) throughout the country in the FY2005 were from Ministry of Communications, Transports, Posts and Construction (66.7% of total administration fees) and National University (19.7%). Another three sectors contributed around 10% of total administration fees including Ministry of Health (3.5%), Ministry of Education (3.2%) and Ministry of Science, Technology and Environment (3.2%). The other ten sectors contributed less than 4% of total administration fees.

Another set of secondary data were retrieved from the Official Gazette of Lao PDR. It showed that the government had major revenue from three main sources: tax, customs and state owned asset management. It clearly highlighted that the administration fees (or obligatory remittances) were a tiny part of the total revenue of the government at around 1% over the five year period (the FY 2001 – 2005). Calculating the evidence in the FY 2005, obligatory remittances raised from the Ministry of Health was only 0.04% of the total revenue of the government.

B) Use of the retained revenue in the hospital

Decree 52 PM indicated that apart from obligatory remittances, the rest of the user fee revenue can be retained and used by the hospital at their discretion, and if the revenue is inadequate, the government will subsidize them. Secondary data obtained from SVK Provincial Health Office (PVD4) was used again. There were some data missing from three district hospitals and they were excluded from the analysis. In total, secondary data of one provincial hospital and 11 district hospitals were analyzed. Interestingly, obligatory remittances and exemptions were recorded as items of expenditure from user fee revenue but these two items were a small proportion of the total expense. Details of the exemptions will be given in the next section. It was clear that the major part of the user fee revenue during the fiscal years 2001-2005 was spent on replenishing medicines in the RDF at both provincial and district hospitals (50% and 68% of total expense from user fee revenue, accordingly). The second largest item was 'other purposes'. Interview data revealed that 'other' meant hospital administrative costs which were beyond the capacity of the government budget. The third largest item was replenishing medical supplies or reagents for laboratory and x-ray departments. Details are shown in table 7.10.

'Last year, the actual administrative cost was 20 million kip (mostly for electricity and piped water bills) but the government could subsidize only 2 million kip and the rest was paid by user fee revenue. We also used it for the maintenance of equipment e.g. computers and cars. Another major item was salary for some staff, mostly nurses, who did not receive a salary from the government. They were waiting for an official position as government employees. The hospital desperately needed more nurses but the government did not have positions for them.'(PVD5)

'Most of the costs were electricity bills for which we got less subsidization from the government budget. Last year, we decided to subsidize house rental for our staff and we also used this money.'(PVD9)

'We used it for things which we could not get from the government budget such as buying new computers and a laptop which you see here. We could not expect to get them from the government budget.'(PVD11)

Table 7.10 Expenses from user fee revenue of one provincial hospital and 11 district hospitals, SVK Province during the fiscal years 2001-2005

	2001	2002	2003	2004	2005	Mean 2001-2005
A provincial hospital						
Replenishing medicines	42%	43%	58%	53%	53%	50%
Replenishing medical Supplies	23%	21%	14%	7%	7%	14%
Exemptions	4%	2%	3%	6%	6%	4%
Obligation Remittance	2%	2%	2%	2%	2%	2%
Others	29%	32%	24%	32%	32%	30%
Total amount (million USD)	0.19	0.27	0.38	0.39	0.39	0.32
11 District hospitals						
Replenishing medicines	68%	70%	75%	63%	63%	68%
Replenishing medical Supplies	7%	4%	5%	7%	7%	6%
Exemptions	4%	8%	3%	3%	3%	4%
Obligation Remittance	3%	4%	5%	5%	5%	4%
Others	18%	14%	13%	22%	22%	18%
Total amount (million USD)	0.06	0.07	0.09	0.10	0.10	0.08

Source of data: Financial Department of SVK Provincial Health Office

7.4.6 Exemptions from paying user fees

Regarding Decree 52 PM, government employees plus their dependents (spouse and children) and pensioners were entitled to free care, which meant they had to pay themselves first and subsequently be reimbursed from 'the Government Employee Scheme'. It was a contributory scheme of 6% of government employees' salary covering 5 benefits (health, maternity, disability, pension and death) (Lao PDR 1993). Decree 52 PM aims to ensure that students, monks and the poor or the low income groups would be exempted from paying user fees. The procedure indicated that the status of 'low income' or 'the poor' could be verified by an attestation affirmed by the Ministry of Labour and Social Welfare (MOLSW), Social Welfare Office at provincial or district level or the village head. The policy was also designed to subsidize hospitals which provided free care to low income people by stating that the Ministry of Health shall propose its annual budget to the Ministry of Finance. It meant that subsidizing for the poor, students and monks would be financed through the general tax system of the government.

On the basis of Decree 52 PM, many groups of people were entitled to get exemptions from paying user fees at public health facilities. However, this study only focused on the poor or the low income people. This section presents four key issues regarding the exemptions. Firstly, data on exemptions in the financial report as shown in table 7.10 above indicate that providers had given some exemptions to patients. It needed to be shown whether the poor got the benefit or not and if they did, how much. Qualitative data were used to reveal the details behind these exemptions figures. Secondly, common practices of providers were identified to show how providers coped with exempting the poor while dealing with serious budget constraints. Thirdly, attitudes of providers and policy makers towards exempting the poor are presented. The final issue presents attitudes of providers and policy makers towards subsidization from the government budget for exemptions.

A) Exemptions data

Referring to table 7.10 above, the provincial hospital and 11 district hospitals had provided exemptions or '*Nayobuy*' to patients at 4% of total expenditure paid from

user fee revenue during the fiscal years 2001-2005. The total amount of exemptions accounted for 66,400 USD in the provincial hospital and 17,000 USD in 11 district hospitals in a 5 year period. However, no more detail could be found i.e., how many patients, which groups (government employees, pensioners, students, monks or the poor), for which items of user fees (e.g., medicine, laboratory, x-ray, registration or room & board) and for what types of services (OP or IP). Therefore, this quantitative data could inform only the magnitude of total exemptions in the hospital but it could not specify beneficiaries from this exemptions. It could not show that the poor benefited from exemptions.

Interviews with providers, including secondary data on exemptions in the fiscal year 2005, provided very important information which showed the complexity of figures in the item called 'exemptions' or '*Nayobuy*' in the financial report from the financial department of SVK Provincial Health Office (PVD4). Mostly, figures of exemptions recorded in the report of SVK Provincial Health Office were not the same as the figures at hospital level. The magnitude of difference between these two data sets was very wide ranging; two hospitals showed a difference of less than 10%, two hospitals showed a difference of more than 10% and three hospitals showed totally opposing data (table 7.11). Interview data could explain some these differences i.e.,

> *'The figure we gave to the PHO was an earmarked amount of the RDF that could pay for exemptions plus value of medicines when health staff were carrying out the outreach programme. These medicines were for both people and health staff themselves.'*(PVD7), '

> *'It consisted of three parts. One was bad debts from the previous year which was approximately 2 million kip. The second was laboratory, ultrasound, registration and room & board costs which are provided free of charge to our staff. The final part was exemptions for the patients. However, it could not identify which patients (poor or non-poor) had received exemptions.'*(PVD11)

> *'Normally, in our report exemptions were divided into eight sub-items; the poor, monks, pensioners, oxygen, transport, laboratory mainly for our staff and their dependents, voluntary contribution to the meeting of the district and others. For*

example, last year fees for laboratory services for the staff was 1,099,000 kip, exemptions for monks was 97,500 kip, money transferred from the hospital to RDF was 1,616,000 kip and we also added 5 million kip we got from the district governor [cash bonus due to the district achieving the target for the obligatory remittance as mentioned above] into this item.'(PVD12)

The items different hospitals included in 'exemptions' varied considerably from hospital to hospital. Whenever unpaid user fees or debt lists were written off (normally on a yearly basis); it would be put into 'exemptions' item. Therefore, the figures of 'the exemptions' given by some hospitals did not represent actual exemptions for the patient, but included bad debts. In addition, the data recording systems of all the hospitals could not distinguish between exemptions for government employees and general patients.

Table 7.11 Difference of exemptions figure between PHO financial report and report at hospital level

	Exemptions in the fiscal year 2005 (USD)			
Hospital	Data from financial report of Provincial Health Office [a]	Data at hospital level [b]	Difference [a]-[b]	[a]/[b]
PVD5	22,170	21,473	698	1.03
PVD6	325	NA		NA
PVD7	300	0	300	DIV/0
PVD8	0	471	-471	0.00
PVD9	104	109	-5	0.95
PVD10	0	513	-513	0.00
PVD11	514	434	80	1.18
PVD12	300	772	-472	0.39

Note: NA: report not available in hospital.
DIV/0: could not be calculated.

Fortunately, the other two hospitals at provincial level (PVD2 and PVD3) had good data bases on exemptions. This was because they were large sized hospitals and the exemptions amount per year was quite large e.g., in the fiscal year 2005, 84,000 USD in PVD2 and 43,000 USD in PVD3. They had their own report format and style. Figure 7.2 (a) and (b) demonstrates that government employees (in particular hospital staff) were the group who benefited most from exemptions (although they are entitled to be reimbursed for user fees from the Government Employee Scheme). Other people got

benefit from exemptions in the region of 23-33% of the total exemptions amount in PVD2 during the fiscal years 2002-2005 and 12-17% in PVD3 during the same period. However, the same problem occurred: the data could not be quantified as 'do the poor benefit or not' and 'if yes the poor benefit, how much do they get'. It could only be concluded that the poor might get an exemption at a lower level than government employees who had better socio-economic status. The interview data in the next section will give a better understanding of why the poor get less exemption.

Figure 7.2 Exemptions provided to different group of patients during the fiscal years 2002-2005

Figure 7.2 (a) PVD2

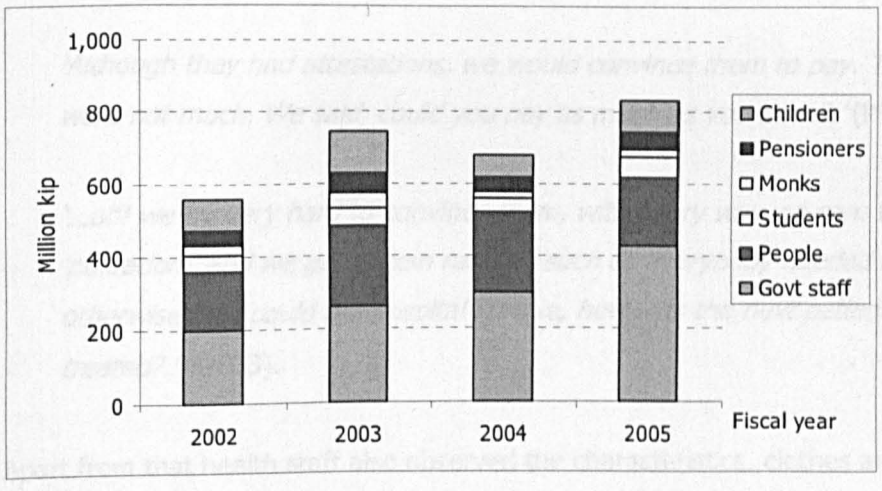
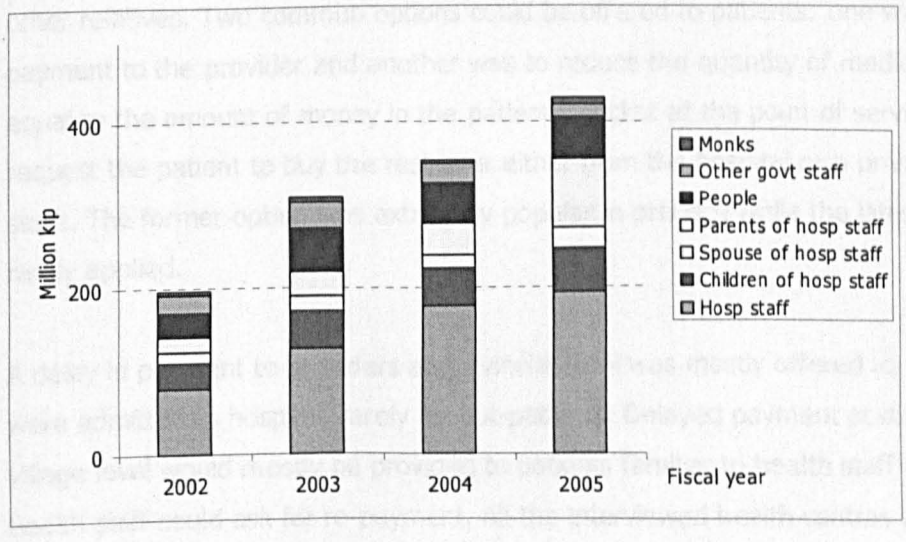


Figure 7.2 (b) PVD3



B) Providers' practices on exempting the poor

PVD7 and PVD15 (consisting of seven health centres) indicated that they had not provided any exemptions to any patients during the previous fiscal year (2005). Other providers gave similar information, that provision of exemptions to the poor was very small. All providers had a common pattern of practice that, initially, health staff would apply a strategy of *'PukRadom'* to all patients. It meant that health staff powerfully persuaded patients to pay user fees whether or not patients had an attestation affirmed by the village head.

> *'...after establishing, if patients could pay, we urged them to pay'* (PVD8)

> *'Although they had attestations, we would convince them to pay. The user fees were not much. We said, could you pay as much as you have?.'* (PVD12)

> *'...oh! we try very hard to convince them, with every way we can. We did 'pukradom' and we gave them reasons such as everybody needed free service, otherwise how could the hospital survive, how was the next patient to be treated?.'* (PVD3).

Apart from that health staff also observed the characteristics, clothes and expression of patients and their relatives as well as enquiring about their assets such as livestock or other relatives. Two common options could be offered to patients: one was to delay payment to the provider and another was to reduce the quantity of medicine to be equal to the amount of money in the patients' pocket at the point of service and request the patient to buy the rest later either from the hospital or a private drug store. The former option was extremely popular in practice while the latter option was rarely applied.

A delay in payment to providers at provincial level was mostly offered to patients who were admitted to hospital, rarely for out-patients. Delayed payment at district and village level would mostly be provided to patients familiar to health staff and then the health staff could ask for re-payment. All the interviewed health centres and district hospitals had similar experiences that the majority of patients could pay at the point of

service, a few patients delayed payment and fewer still received exemptions. For patients with delayed payment, most of them could repay the providers anyway. Providers had experience of few bad debts compared to total debts.

> *'Mostly we were repaid by patients, around 80-90% of the total debt. Only a tiny part was bad debt. If we were not familiar with them (patients), there was more likely to be bad debt.'*(PVD6)

> *'For patients who delayed payment, usually they could repay within 2-3 months and we got almost 100%. They repaid when they came to the hospital next time. Or when we went to the village for child immunization, we asked them to repay.'* (PVD7),

> *'Almost all the debt could be repaid. This was because we knew the patients and could ask for repayment. We sent a list of them to the village head.'*(PVD8)

C) Attitudes towards exemptions

All the interviewed providers (both in SVK Province and Vientiane Capital) had the same perception that patients had brought money to pay user fees at the point of service.

> *'They intentionally came to the hospital, they had obtained money already.'* (PVD11)

> *'Almost all of them had had cash in their pocket before coming to the hospital'* (PVD8),

> *'Almost all patients had money even monks and students. If monks and students could pay, they paid.'*(PVD3)

It was learnt from the households' perception that exemptions were for 'the destitute', but not for 'the poor'. The definition of who was entitled to exemptions was asked from the providers and policy makers. All the interviewed providers in SVK Province had the

same perception as that of the households. They perceived that patients were poor, not destitute. The poor still had money to some extent unlike the destitute who had nothing; neither assets nor relatives. Exemptions were for 'the destitute' and delaying payment was for 'the poor'.

> *'We offered to let them delay payment because they were not destitute. They had no cash but they had assets and would be able raise cash if they were given time.'*(PVD6)

> *'cash-exemptions was for the destitute; time-exemptions was for the poor'* (PVD14).

> *'Exemptions were for the destitute person who was ultra-poor and suffering badly; it was not for the poor who still had something, even if their life was hard, and the poor would be allowed to delay payment.'*(PVD8).

However, seven policy makers who were asked about 'the destitute' and 'the poor' and providers in Vientiane Capital believed that 'the destitute' was similar to 'the poor' and they could be used interchangeably. 'The destitute' was just a technical term and more likely to be used by a highly educated person whereas 'the poor' was commonly used by all.

Another key concern of policy makers and providers was that there were no clear criteria to identify the low income person. Some of them did not trust in an attestation issued from a village head. As a result, providers felt reluctant to exempt.

> *'...attestation from the village head, it could not guarantee the truth whether they were really poor or if they were familiar with the village head.'*(PVD10)

> *'No one could know who was poor. The government also did not prove who was poor. They just knew how many poor there were.'*(PVD11)

D) Subsidization for exemptions

All the interviewed hospitals at provincial and district levels complained that the hospital did not receive financial support for the exemptions and at the same time the hospital had budget constraints.

> *'If we strictly followed Decree 52 PM (automatically gave exemptions to monks and students), how could we remit the obligatory remittance to the district governor?'*(PVD8)

> *'We needed to earn money for the administrative costs of the hospital as well as the obligatory remittance. If someone could adequately support us, we would like to not charge patients.'*(PVD10)

> *'Having a framework to practise exemptions but no budget support...how we could do it? We also had to financially survive by ourselves'*(PVD7)

Meanwhile, policy makers understood the real situation that the hospitals had been confronting. In practice, there was no specific government budget item for subsidizing the exemptions. The Ministry of Health never requested budget for exemptions from the Ministry of Finance. It was because of limitations in developing a rigorous budget plan.

> *'Never set a budget plan for exemptions because there are no clear cut criteria for identifying the poor. It is difficult to defend the budget from MOF and the National Assembly. If we had a detailed plan and criteria who are the poor we could know how many poor there are. It is possible to get a budget depending on (1) the fiscal capacity of government and (2) the proposal of the MOH which must be valid, reliable and robust.'*(PMK4).

7.4.7 Monitoring and reporting system

There was no official monitoring system on user fees and exemptions from a central organization. One reason was the decentralized management system. The MOH did not have direct authorization to command a monitoring system including data collection.

> *'It was difficult to gather data from district and provincial hospitals because they directly reported to the local governor. The MOH only monitored the central hospitals in VTE capital.'* (PMK4 who was directly in charge of planning and budgeting of MOH).

The interview with PVD4, the head of the financial department of SVK Provincial Health Office (PHO) revealed that, in theory, every hospital should submit a financial report to the PHO on a quarterly and yearly basis on user fees and exemptions. In practice, submission of financial reports from the hospitals was erratic and the quality of the report was not good. There was a great variation in the management of financial reports on user fees and exemptions among hospitals. Two main variations were a template of the reports and the way of producing and keeping the reports. Regarding a template, although the PHO had circulated a template of the report on user fees and exemptions to all hospitals, in practice, some hospitals used the template but others did not. Reports of user fees and exemptions from central hospitals (PVD2 and PVD3) had more details than provincial and district hospitals. Central hospitals had created their own style of reporting because of the huge amount of user fees and exemptions.

In contrast, the report of the government budget was found to be in a consistent template with regular submission of quarterly and annual reports for all hospital levels; central, provincial and district.

In terms of producing and keeping the reports, some hospitals had poor management but some (1 provincial hospital and 2/7 district hospitals) had very well organized filing system for the reports.

All the interviewed hospitals perceived that financial reporting requirements on user fees and exemptions caused a massive amount of paper work for the hospital. None of

them, except PVD8, saw any benefit to the reports. On the other hand, one district hospital (PVD11) expressed that the reports might have a negative effect on the hospitals regarding the percentage of obligatory remittance from user fees.

> '*...it was just a report. It never had had any impact on us as we never received any subsidization even though we paid for the poor.*' (PVD10)

> '*How much we paid for the exemptions is our own responsibility. It doesn't matter how much we reported as we never got any subsidy. And we know that government has not enough money.*' (PVD5)

Another district hospital (PVD8) had recently implemented a new project similar to the Equity Fund supported by the Belgian Technical Cooperation (BTC). The observation and the interviews indicated that the health staff of PVD8 had enthusiastically developed a systematic financial reporting system in order to reimburse exemptions from the BCT project.

7.5 Discussion

7.5.1 Discussion of methodology

Policy makers

At the beginning of the fieldwork, some current policy makers in the Ministry of Health were purposively selected. Each interviewee was asked at the end of the interview process to recommend other current or ex-policy makers who were heavily involved in the user fee and exemption policy. Finally, a total of 22 policy makers were interviewed by the research team. This technique to obtain sampled interviewees has advantages and disadvantages. It was an effective technique to ensure that the most relevant policy makers were not missed. The most relevant policy makers were repeatedly mentioned by many respondents. It also provided an indicator of potential interviewees in the study. The research team verified with the respondents whether the study had covered all relevant interviewees. However, this technique was based on the personal relationship between the initial respondent and another nominated person and could cause problems of selection bias. The study therefore prevented selection bias by verifying the list of interviewees with many other interviewees. Since Lao PDR is a compact society, especially in the health sector, it was possible to verify the coverage of all relevant policy makers.

Public health care providers

Although the number of sampled public providers was limited, a total of 29 settings in SVK Province and VTE capital, they consisted of all levels of public health facilities in Lao PDR, namely health centre, district hospital, provincial hospital and central hospital. Health centres and district hospitals were in both poor and non-poor districts. Obtaining information on public health providers benefited from synergies between quantitative and qualitative methods. For each provider, the fieldwork started with quantitative followed by qualitative research. Requesting financial reports from the most recent fiscal year of each health facility was an effective approach as it did not require any effort from either the providers or the researcher. Every provider had already produced the report. In cases where the hospital had produced a comprehensive report like a hospital annual report, the providers were keen to discuss it. This helped establish familiarity with the respondents before conducting the

interviews. The reports also provided an overview of the provider and some useful data for the interviews such as the history of the hospital, a list of the directors, mission and vision of the hospital, human and financial resources and output of the hospital. Some reports presented an analysis of user fees and exemptions, constraints on the implementation of exemptions and the way forward to overcome those constraints. Since the figures in financial reports normally fail to inform all dimensions of the data or rationale, qualitative data can fill this gap. It was also a good approach for cross checking the validity and reliability of information between the two sources.

There might have been problems of respondent bias during the fieldwork with public providers in SVK Province because the RA was a member of the health staff in SVK provincial health office. The same problem happened in VTE capital because the research team consisted of health staff of the National Institute of Public Health (NIOPH). The respondents perceived the research team to be high level professional health staff and might have been more likely to intensify their problems, especially insufficiency of hospital revenue to cover expenditures and financial burden due to exemptions. However, these could be cross-checked with the secondary data. It was apparent that potential bias of the respondents had no effect on financial information. The findings from the interviews were used to explain the secondary data, and to assess customary practice and attitudes of the providers.

7.5.2 Overview of findings

The national policy on user fees and exemptions was legally endorsed on 26 June 1995 (known as Decree 52 PM). However, a cost-recovery system, in particular the Revolving Drug Fund (RDF), had been implemented in the Lao health system before the establishing of the policy.

Decree 52 PM had clearly highlighted topics about user fees as well as exemptions to many groups of people including the poor or the low income group (prime concern of this study) using an attestation affirmed by government offices or village heads but did not mention the criteria for identifying the poor. The policy had spelled out an intention to subsidize the providers who provided exemptions.

The policy had been promulgated from national level to providers and village levels through routine channels. Some health staff did not clearly understand the policy even now. The user fee revenue was significant for public providers especially for provincial hospitals (two thirds of the total hospital revenues) and district hospitals (one third of the total hospital revenue). Providers mainly spent it for replenishing medicines in the RDF, reagents for diagnostic tools and other necessities beyond the government budget capacity, for instance buying computers, maintenance of equipment and incentives for hospital staff. A small part of user fee revenue (1-5% of the total revenue from user fees) was remitted to local coffers which was called 'obligatory remittances' with a very different practice among hospitals. In practice, providers remitted 'obligatory remittance' to local governors from whatever source of money hospitals could find.

The study focused on exemptions for only the poor or the low income group. Exemptions shown in the financial reports were a small portion (4% of the total expenditure from user fee revenue). Government employees especially hospital staff got most benefit from exemptions while other people got less benefit. The existing financial report template was unable to display whether the poor got exemptions or not. It is believed that the poor rarely got exemptions as long as health staff preferred to *'Pukradom'* or strongly convince all patients to pay user fees even if patients had an attestation from village heads. It was very popular in all providers that the payment to

providers could be delayed when patients had inadequate cash at point of service. Most providers could get repayment because they allowed delayed payment to patients whom they were familiar with and could ask for repayment. Providers in SVK Province perceived that exemptions was for 'the destitute' (who had neither assets nor relatives), not for 'the poor' (who still had either assets or relatives). The providers had covered the cost of exemptions by their own revenue; no government budget subsidy for exemptions was given to hospitals. There was a great variation in the template of reports of user fees and exemptions, unlike reports of the government budget which had a single template with quarterly and annually submissions. Each hospital had its own understanding and modification of reporting user fees and exemptions which led to inaccurate figures of exemptions to the patients.

7.5.3 Discussion of findings

Lao PDR gained independence in 1975 and adopted a New Economy Approach and decentralization in 1986. User fees in the Lao health system have officially been in operation nationwide since 1995 but, in fact, a cost recovery system was developed locally before 1995 across the country, with little or no direction from the centre. This was similar to Cambodia and Uganda where the user fees system emerged during a period of conflict and weak central government (Russell et al. 1997). It created a diversity of fee practices among health service facilities and among districts. Unlike Zambia, a country with a more planned process of decentralization, districts had a greater role than the state in setting fees and using revenue. In contrast in Thailand, where the government was more centralized, the national policy on user fees was well developed and each province functioned under a central policy framework.

Although the objective of the user fees system was not explicitly stated in Decree 52 PM, it was commonly mentioned by the respondents that, because of diminishing of support and government budget constraints, it was designed to generate revenue in public health care facilities. The other three goals of user fees; (1) to improve efficiency of the health system, (2) to improve quality of health services and (3) to promote equity of access to health care services, were never stated as the policy goals and hardly mentioned by the interviewees. Some interviewees mentioned improving availability of medicines in hospitals. This implied that the objective of user fees was a narrow emphasis by the policy makers and providers on raising revenue for the health system, in particular in light of the difficult economic conditions of the country. This might have resulted from lack of awareness on the part of some policy makers of the need for the policy to promote access for the poor and to improve quality of care.

In principle, health financing inequity due to geographic and economic conditions could be addressed by pooling a proportion of revenue from user fees at district, provincial or central level (within the Ministry of Health) and then redistributing pooled money to poorer areas where there was less capacity to raise fee revenue. However, Decree 52 PM did not have an objective to improve financial equity at any level – within district, province or across the country. Each local provider benefited directly from collected user fees because almost all the fee revenue could be kept and used at local level. This

procedure exacerbated existing financing inequities between district hospitals in the poor and non-poor districts as health care providers in wealthier areas could generate greater resources. The fee revenue that the district hospital in the poor district could generate was lower (at 0.08 USD per person in 2005) than the non-poor district (at 0.22 USD per person in 2005). The government subsidized a slightly higher budget per capita for the poor district hospital. However, it still could not achieve financial health equity among everybody in the poor and non-poor districts (revenue from government budget plus user fees at 0.74 USD per capita in the poor district hospitals and 0.77 USD per capita in the non-poor district hospitals in 2005). Arrangements for local retention of fee revenues in Lao PDR yielded benefits to local providers. This was unlike the situation in some countries where all fee revenues reverted to the central Ministry of Finance so health facilities, and the health sector as a whole, did not benefit from collecting user fees and the health facilities, therefore, had no incentive to collect user fees (Russell et al. 1997).

In Lao PDR, the total fee revenue of each district and provincial hospital was split between the local treasury (called obligatory remittances) and the collecting facility (called fee revenue retention). The health centre could retain 100% of the fee revenue and use it at the collecting health centre. The study found that practices of obligatory remittances and fee revenue retention widely differed among the sampled district and provincial hospitals in SVK province and VTE capital. The interviewed providers and the participants of the two one-day workshops echoed that these practices varied greatly not only in SVK province and VTE capital but also across the country.

Although the obligatory remittances were around 1-5% of the total fee revenues, which was minor compared to fee retention at local facilities, the interviewed providers had different preferences as to whether obligatory remittances to the local coffers should be continued or not. The SVK provincial hospital and 2 non-poor district hospitals preferred to stop obligatory remittances but 3 poor and 2 non-poor district hospitals) preferred to continue. The issue in terms of obligatory remittances practice was the providers' belief that it was a duty of the organization to support the government regardless of the economic status of the hospital. It was comparable to the villagers' belief that it was a duty of the patient to pay user fees to public health

providers. This evidence reflects the willingness of the Lao community to comply with government regulation.

Each health facility could plan its own use of retained fees. The local health facilities had responsibility for making decisions on fee revenue. The policy makers at central and provincial levels did not provide financial management skills, systems or procedures for effective use of fee revenues to the local providers. The national policy did not have a policy framework or guidelines on the effective use of such revenue to facilitate its use for preventive and promotional activities or cost-effective interventions which could have a positive impact on the poor.

Practice for reporting systems of revenue and expenditure of user fees greatly differed among health providers. The national policy design did not present any systematic evaluation of user fee policy impact. It was questionable whether the implementation of user fees policy in the Lao health system had contributed to health service improvements at the community level and for the health system as a whole.

According to Decree 52 PM, user fee exemptions for services essential to public health have not been recognized in the Lao health system. In practice, a few essential services were provided free of charge e.g. child immunization and treatment for TB, leprosy and AIDS patients. Basic services for pregnancy like ANC (antenatal care) were overlooked by policy makers. Pregnant women had to pay user fees for each ANC visit and even for a book to record pregnancy progress.

The Lao government, in principle, recognized the need to exempt those unable to pay user fees to public health providers. Decree 52 PM advocated exemptions applying characteristic targeting (civil servants and their family, students, monks) and direct targeting (the poor or low income group). Neither geographical targeting nor ethnic targeting of exemptions were applied in Decree 52 PM, even though it has been commonly accepted throughout the country for many years (before 1995) that *Lao Sung* (high land) was the most disadvantaged group, while *Lao Theung* (mid land) was less disadvantaged than *Lao* Sung and *Lao Lum* (low land) was the least disadvantaged group of all. The terms of Decree 52 PM have made it impossible to ensure exemptions for women's and children's health services, despite the challenge of

achieving the Millennium Development Goals (MDG) for child mortality reduction and improved maternal health.

Decree 52 PM clearly advocated that civil servants and their family and the poor or the low income group were protected from paying user fees from their own pockets. In practice, Lao PDR showed a similar pattern of exemption to other countries studied by Creese and Kutzin (1995) and Russell et al. (1997). Fee exemption systems actually worked against equity goals – exemptions were provided to civil servants, in particular to health workers in the hospitals but the poor were urged to pay user fees.

In terms of exempting the poor, Decree 52 PM did not indicate clear eligibility criteria or guidelines on identifying the poor or low income group. The policy makers gave significant power to the village head by issuing temporary attestation of the poor on the understanding that the village head was familiar with the villagers. Many interviewed hospitals thought that this increased the subjectivity and inconsistency of exemption implementation across the community and it created distrust between the provider and the patient. The study found that the providers scrutinized the poor with their own judgment even if the poor had attestation. It meant that, in practice, the poor were entitled to exemption but the public health care providers had a powerful final say in whether they would provide exemption to the poor or not.

In addition, the central Ministry of Health was not concerned about the amount of money public providers were spending on exemptions. The policy makers at central level transferred financial responsibility to the local health providers whilst user fees were important revenue for the local providers. This resulted in reluctance on the part of the health workers to provide exemption to the poor and they urged the poor to pay user fees.

A policy of user fee and exemption for the poor were endorsed in the same national decree, Decree 52 PM. However, all villagers clearly understood and strongly accepted the concept of paying user fees to public health providers but almost no villagers had known about the policy of exempting the poor. This indicated that all levels of policy makers and public health providers deliberately promoted user fee policy to the villagers and at the same time had no intention of promoting the policy of exemption

to the villagers. When the public health providers explained the exemption policy to the villagers they established their own criteria for granting exemption - the exemptions were for 'the destitute'. This specific criterion was conveyed to the village head and the VHV and understood by households. This resulted in, at local level, a limited number of eligible people for the exemptions. However, the policy makers understood differently – the poor and the destitute meant the same and could be used interchangeably which meant that the poor/the destitute were entitled to exemptions.

Based on this evidence and attitudes of providers, the interpretation of the research is that the actions of not promoting the exemption policy and setting restrictive criteria for granting exemptions were strategies of the local public health providers to keep the amounts of exemption as low as possible. Reasons for this included the majority of people in the community were poor, there was no government budget to support the exemptions, the providers had financial incentives to save fee revenue as much as possible, and the providers had an incentive to provide exemptions to civil servants, in particular health staff.

The findings showed that the Ministry of Health did not have clear practical guidelines on user fees and exemptions, never requested a budget for subsidizing providers to exempt the poor, never supervised local providers and did not have a monitoring and evaluation system on exemptions. This evidence demonstrated that the Ministry of Health lacked capacity to translate exemption policy into practice – it did not have the administrative and financial capacity to implement the exemption policy.

7.6 Concluding remarks

In terms of policy itself, Decree 52 PM was not designed to provide any benefit to the poor or to improve the health system as a whole. The policy makers lacked both technical and financial capacity to translate policy into practice. With limited support from the government budget, the public health providers had economic incentives to collect fee revenue but no motivation to grant exemptions to the poor.

The circumstances of the user fees policy design and implementation led to limited success - only the objective of raising revenue for the collecting health facilities had been accomplished.

The findings from this chapter together with the previous chapter clearly indicate that the exemption policy was ineffectively implemented. The policy was not able to protect the poor from paying user fees at public health providers which led some households to experience catastrophic health expenditure and some of these were impoverished.

Based on the evidence, lessons on improving the exemption policy can be identified. The policy itself ought to be comprehensible. In order to protect the poor, the policy objectives could be explicitly specified in terms of protecting the poor from impoverishment due to health expenditure and promoting equity between the poor and non-poor groups. The target groups of the policy must be clearly indicated. In resource-poor settings where the majority of people are poor, there must be several groups of the needy. Priority setting can be applied to prioritize limited resource to the most needy or seek more funding support from various possible sources to meet budget requirements. Overall domestic and international contexts must be taken into account, for example the policy direction of the poverty eradication project for the entire country and the MDGs. This will not only avoid duplication among several projects but also maximize the benefits of different projects being run either by groups of people, areas or interventions. The best approach is that the policy is able to serve both domestic and international purposes. Nevertheless, if this is not possible, it is important that the main concerns of the country are prioritized.

Success of policy implementation requires adequate qualified health workers and sufficient resources. Comprehensive and practical procedures will facilitate the implementation process. Lao experience shows that even in difficult circumstances (limited human and financial resources), the public health care facilities achieved some policy success e.g. child immunization coverage in SPX village (chapter 4). Another advantage in the Lao context was that the health facilities and villagers were more likely to act in accordance with government regulation.

It can be concluded that in order to achieve better protection of the poor from health expenditure in Lao PDR, policy design is the most critical point. Experience of the implementation of the user fee and exemption policy has identified weaknesses and they can be prevented. The strength of the existing health delivery system and advantages of a strong social network in the community could be employed in order to accelerate the accomplishment of the policy goals.

CHAPTER 8
IMPROVING HEALTH FINANCIAL PROTECTION OF THE POOR

8.1 Introduction

User fees have been implemented in the Lao health system for many years. The government had the intention to protect the poor or the low income group from paying user fees at public health providers by issuing the national policy on user fees and exemption, through the edict known as Decree 52 PM, since 26 June 1995.

The main findings from the household side clearly highlighted that some households were faced with catastrophic health expenditure and, subsequently, had negative consequences from health expenditure. They managed financial crisis themselves with many coping mechanisms which mainly drew on the social network within the village. The households believed that exemption was impossible. Almost no villager had known about exemptions. The few who knew understood that exemption was for the destitute, not for the poor. They inferred that they were the poor and not eligible for the exemption.

Apart from the households' perspective, the obstacles of exemptions implementation from providers' and policy makers' perspectives were found. The public health facilities faced budget constraints and they mainly relied on user fee revenues. Small amounts of fee revenue were used for exemptions from which the poor got less benefit but government employees, especially hospital staff, got most benefit. The government did not have a specific budget line to subsidize providers who had given exemptions to patients. At national level, there was a lack of guidelines for exemption implementation, in particular on the procedure of identifying the poor. This led to different understanding of who was eligible to exemptions between the policy makers and providers/households.

The analysis found that the national policy on exemption (Decree 52 PM) did not provide benefit to the poor or the low income group. In the meantime, households were faced with paying user fees at public health providers which could result in household catastrophic health expenditure and impoverishment. Therefore, there is an

urgent need for the government to improve the design and implementation of exemptions or reform the policy on subsidizing health care for the poor.

This chapter aims to respond to the last objective of the study (objective 6: To analyse the financial implications of alternative protection mechanisms and to identify policy implications for pro-poor financing and provide policy recommendations on improved ways of protecting the poor). It brings together knowledge from literature reviews, evidence from the household study and information on the current situation in Lao PDR to structure a modelling exercise to explore the financial feasibility of funding protection for the poor. Simple financial modelling is used to identify a preferred financing model and its implications.

This chapter is organized as follows. Section 2 outlines the methods used to propose financing model options and to estimate their financial implications. Section 3 presents a framework for the analysis in this chapter. Section 4 provides main findings from the analysis of each element which are used as input for constructing possible financing models. The preferred financing model and its possible implications are presented at the end of the section. An overview of the analysis, discussion and concluding remarks are at the end of the chapter.

8.2 Methodology

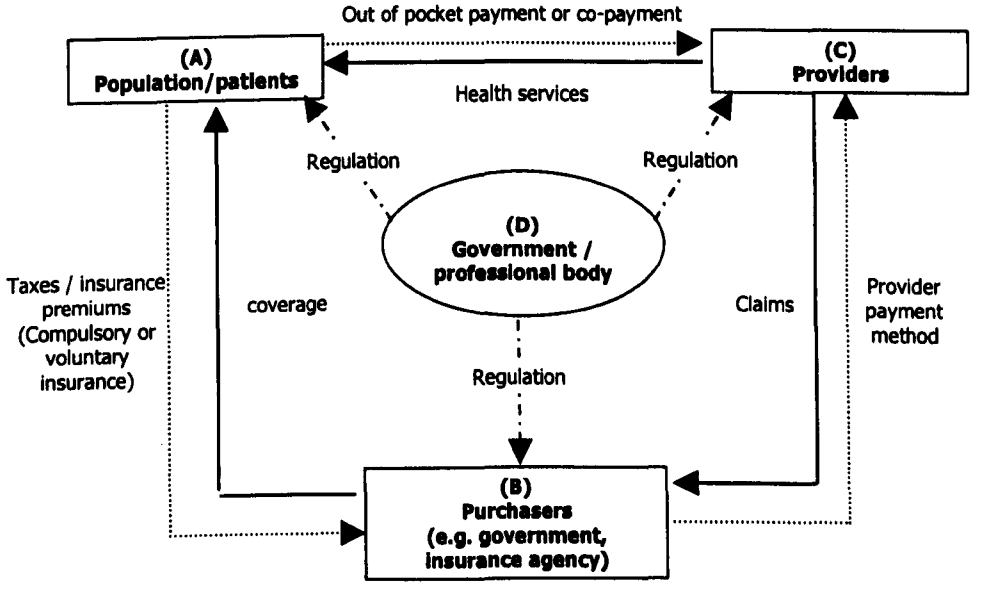
In order to achieve the aims of the chapter, several sources of data were employed for the analysis as follows;

- Document review on the most recent government regulation and law related to health insurance in Lao PDR
- Statistical reports e.g. Lao Official Gazettes for revenue and expenditure of the government, National Health Account from WHO website, services reports of the hospitals in SVK province. This information was analysed to input into the policy options and analyse their implications.
- Findings from FGDs of the two villages in the non-poor district on issues of better protecting the poor and features of housholds' contribution. As mentioned in the methodology chapter, guidelines for discussion on these issues were developed during the fieldwork in the non-poor district (after finishing the fieldwork of the two villages in the poor district). So these questions were discussed only in the two villages of the non-poor district. It was not feasible to go back to the two villages of the poor district and re-start FDGs again.
- Results of two one-day workshops involving policy makers and providers in VTE capital were also used.

8.3 Framework for the analysis

In order to recommend options for health financial protection to the poor, firstly, it is necessary to draw an outline for the analysis to cover all key elements of health financing. Many frameworks in health care reform arena have been presented by many experts. One framework originally established by Reinhardt in 1989 which was suggested as the simplest framework (Mills 2000) was adopted in this study. The framework is adequate for analysis in this chapter. The framework presents four key actors namely (A) the population who pay for and get health services, (B) the financial intermediaries or purchasers who collect funds and pay providers, (C) the providers who deliver health services to the patients and at the same time get financial support from the purchasers and/or the patients and (D) the government who regulates the system (figure 8.1).

Figure 8.1 Four key actors and functions of health system



Source: modified from Reinhardt 1989 cited in Mills 2000

The framework provides an overall basis for consideration of the financing model. Together with the objectives of the chapter, the structure of the analysis is set in subsequent sections as follows:

- *Current context of health insurance schemes in Lao PDR*: It is important to understand the recent direction of health financing in the Lao health system in order to provide reasonable policy options.
- *Who is 'the poor'?*: It is a vital question to be answered in order to estimate the numbers of target population to be used to calculate the financial requirement.
- *Provider payment method*: The provider payment method is a determinant of the financial implications in the models. Different provider payment methods result in different financial implications. It is essential to decide which method will be applied.
- *Financial requirement to serve the poor*: Total financial requirement is estimated and compared to the budget of the Ministry of Health (MOH) and the GDP (Gross Domestic Product) in order to see the magnitude of total financial requirement.
- *Possible financing sources to support the poor*: Several financing sources; namely government budget, household contribution and grants, are analysed for their potential to support the poor. At the end of this sub-section a possible financing model is recommended.
- *Protecting the less-poor*: The analysis found a good opportunity to expand health financial risk protection for not only the poor but also the less-poor.
- *Health financial protection for all*: A financing model to protect the poor and less-poor, and incorporating two current schemes (for government employees and private workers) is developed in order to summarize the whole picture for all Laotians.
- *Prerequisite for the development and implementation of the financing model*: The analysis in this chapter explores the financial feasibility of financial protection for the poor. This analysis has to make a number of assumptions with respect to other conditions and constraints which need to be tolerably supportive, despite the complex context identified in the earlier chapters. Therefore, this last section will clarify assumptions on conditions and constraints which are prerequisites for effective financial policy implementation.

It also discusses the way forward on the testing of the financing model and further development of financing policy.

8.4 The analysis

8.4.1 Current context of health insurance scheme in Lao PDR

The study recognizes the government's intention to protect the poor as stipulated in the most recent law, namely Curative Law endorsed on 9 November 2005 and signed by the President. The law clearly highlights that the objective is to assure that all family members and communities would generally and equitably receive quality health services. A total of six health insurance funds are explicitly stated in the article 45-50 which cover different groups of Lao people and have different sources of finance (table 8.1).

As of 2006, three public health insurance schemes have operated in Lao PDR; Government Employee Scheme (GES), Social Health Insurance Scheme (SHI) and Community Based Health Insurance (CBHI). *GES* is a compulsory contributory scheme with contributors contributing 6% of their salary which is automatically transferred to the fund every month. The scheme provides health benefits to the contributors and their spouse and dependants which are estimated at 786,800 persons[9]. *SHI* is a compulsory contributory scheme which is funded by employees and employers' contribution at 4.5% and 5% of employees' salary, respectively. The scheme provides health benefits to contributors and spouse and dependants. Even though it is a compulsory scheme, its coverage is still low. The total beneficiaries in July 2006 were 56,211 persons[10] compared to the total estimation of 141,272 private employees and state owned enterprise employees[11]. It is hope that the scheme will be extended to cover all potential contributors. The majority of the Lao population (more than 70%)

[9] Estimated at 14% of total 5.62 million population: Consultant report 14-18 February 2005.
[10] Aviva Ron September 2006. Consultant paper: ILO/ISSA/AIM study on linkages between statutory social security scheme and community based social protection mechanisms to extend coverage, Case study on Lao PDR.
[11] http://www.ilo.org/public/english/region/asro/bangkok/index_lao_social.htm#_ftnref3 Estimate based on figures contained in the 2005 population census – 121,786 private employees and 19,486 state owned enterprise employees. Total = 141,272 workers (search on 29 June 2007)

works in the informal labour sector and therefore they are excluded from the two formal schemes above. *CBHI*[10] is a voluntary contributory scheme which covers all family members. It was set up in 2002 as a pilot project in some villages of three districts. By July 2006, five local settings were operational in rural and semi-urban areas which covered only 18,829 beneficiaries. With the nature of a voluntary scheme, especially given monthly payment of the premium, it is quite risky for CBHI in terms of risk pooling and financial sustainability. A private insurance fund is indicated in the Curative Law, article 49, and in practice there is one profit insurance company in Lao PDR. This study will not discuss private health insurance because providing free health care to the poor is not its concern.

'The Curative Law' declares an intention to protect the poor using '*the Social Welfare Fund*'. Nevertheless, statements in the law are similar to 'the Decree 52 PM' for example "the poor or the low income group who has attestation from head of the community would be exempted from paying user fees by their own pocket but 'the Social Welfare Fund' would pay instead according to the regulation". But, in practice, by the end of the fieldwork, no action on the implementation of the Curative Law had been taken. Table 8.1 summarized health insurance funds according to 'the Curative Law' with current beneficiaries in each fund. It clearly shows that, currently, few Lao people are entitled to financial health risk protection and the majority of Lao people, including the poor, are not protected.

Table 8.1 Health insurance funds in Lao PDR according to 'the Curative Law'

Curative Law	Health Insurance scheme	Entitled people	Possible sources of finance indicated in the Curative Law	Current covered population (As of July 2006)	Covered people as % of total population
Article 47	Government Employee Scheme (GES)	Government Employees, spouse and dependants	Mandatory contribution from government employees	786,800	14.0%
Article 48	Social Security Scheme (SSS)	Employees in private sector, spouse and dependants	Mandatory contribution from employers and employees	56,211	1.0%
Article 46	Community Based Health Insurance (CBHI)	Families who pay contribution to CBHI	Voluntary contribution from households	18,829	0.3%
Article 49	Private insurance	Those who can pay premium	Voluntary contribution	NA (very few)	NA
Article 50	Social Welfare	The poor or low income group	Contribution from government, individual, community, domestic and international organizations	Unclear	-
Article 51	No insurance: pay by out-of-pocket	The rest of the population	Household out of pocket	4,758,160	84.7%
Total population				5,620,000	100%

8.4.2 Who is the poor?

The main objective of this sub-section is to suggest possible options for how best to target support to 'the poor'. The most important element for protecting the poor is to identify who is 'the poor'. In this study, 'the poor' is defined as the worst-off households or the needy in terms of financial risk protection. Unit of analysis is the household, not individual person, for two reasons. Firstly, because of the economy of the majority in Lao PDR; about 80% of the population relies on subsistence agriculture. Chapter 4 showed that all 172 sampled households had the same occupation, rice farming, where everyone in the household contributed their labour even children,

woman and elderly. All household members would share the same basket of income or consumption. Secondly, the other three health insurance schemes cover contributors and their family. So it was justified to consider the household as the unit of analysis.

Referring to the targeting literature (Newbrander et al. 2000), direct targeting and characteristic targeting by geography will be used to analyse possible options to identify 'the poor'.

Characteristic targeting by age group

Characteristic targeting by age group (elderly and children) is unlikely to be feasible or appropriate. It will have problems of leakage and under-coverage, covering some elderly and children who are not poor, and excluding some poor who are adults. Administrative problems are a major obstacle. At this time, birth registration has not been implemented and house registration and identity card have just been implemented in some provinces in the year 2005. They are still incomplete throughout the country. Furthermore, age information filled in the house registration was from rough guesses.

Characteristic targeting by geography

According to the Lao National Growth and Poverty Eradication Strategy - NGPES (Lao 2004), a total of 142 districts throughout the country have been classified into three main groups; 47 poor districts as priority for poverty eradication, 25 poor districts but not the priority and 70 non-poor districts. This is the easiest approach; no need for additional efforts or administrative cost to identify the poor district. In addition, the list of these 47 poor districts is acceptable from various organizations and people throughout the country, especially the policy makers and politicians.

Nevertheless, the concern is two main weaknesses - 'leakage' and 'under-coverage'. There is leakage to non-poor households in the 47 poor districts particularly in urban areas, for instance shopkeepers in a market. Concurrently, the poor households in other districts, outside the 47 poor districts, may be as poor as those in the 47 poor districts and they are still confronted with financial risk. Another concern is that it is not guaranteed how often the NGPES will update the list of the 47 poor districts and/or revise criteria for identifying the poor households, villages and districts. The NGPES has

identified poor districts using criteria related to poor villages, local school, dispensary or pharmacy, access road and safe water. It may not be completely accurate. For example Vilabouli District in SVK Province has had a vast investment in gold mining by an Australian company who began successful production of gold and copper at the end of 2002. This huge project has lead to massive income for the Lao government and, local employment, and health care services provided by independent hospital of the mining company. It can be argued that this district should be not in the list of poor districts but it is still there. It is possible that the list of poor districts might be subject to political favouritism and might be manipulated. For the reasons above, selection of all people in the 47 poor districts would not satisfactorily target the poor.

Direct targeting (Option A)

In order to prevent the problem of leakage and under-coverage, direct targeting to identify the poor households throughout the country is considered. Direct targeting or means testing requires information which may be time-consuming and costly. Direct targeting applying wealth ranking by the village committee members is possible, as demonstrated in the study villages. The poorest or the worst-off classified by villagers would not be greater than one third of the total population in the community which matches the official figure of 32.7% poverty incidence in Lao PDR in 2003. In addition, at the beginning of the fieldwork (7th November 2005), the researcher interviewed a high level person of the Planning and Cooperation Department, SVK Provincial Office and found the official practice of identifying poor households as follows. In actual practice, the village head of each village provided information on how many households and specified which households in the village were the poorest to the staff of the local governor. This means that poverty incidence relied on the village head. After that the staff visited each poorest household specified by the village head in order to assess the poverty profile of the household according to the five criterion set in NGPES (lack of rice - less than 16 kg/person/month, lack of clothes, lack of shelter, insufficient income to cover the cost of medical treatment and child schooling costs). Thus current practice is already based on village level information and investigation.

Geographical targeting combined with direct targeting (Option B)

Another approach is a combination between characteristic targeting by geography and direct targeting. The 47 poor districts are chosen and then the worst-off households are identified applying wealth ranking by the village committee members.

Two approaches are subsequently taken into account in the analysis – the direct targeting (Option A) and geographical targeting combined with direct targeting (Option B). Table 8.2 presents advantages, disadvantages and estimated beneficiaries of each approach of targeting including the status quo.

Table 8.2 Scenario of who will be identified as 'the poor'

Option	Targeting	Beneficiary (people)	Pro	Con
Status quo	Using attestation by village head	- (very few)	-	The poor suffers
Option A	Direct targeting	The poor throughout the country, about 32.7% of total population (1,837,740) *	Cover the poor throughout the country	Need efforts for identifying process in all 142 districts throughout the country
Option B	Geographical and direct targeting	The worst-off households in the 47 poor district (349,176) **	This group is the neediest.	Need efforts for identifying process in 47 districts, under-coverage of the worst-off households in non-poor districts
Not considered in the analysis	Characteristic targeting by geography	Total population in the 47 poor districts identified by NGPES	Easiest approach, refer to NGPES, and then no cost for identifying the poor	Ineffectiveness – leakage to the non-poor households in 47 district and under-coverage of the poor households in non-poor districts
Not considered in the analysis	Characteristic targeting by age group	Elderly and children	Registration problems	Leakage to non-poor elderly and children and under-coverage to adult who are poor

Notes * Estimate from 5.62 million people x 32.7% poverty incidence = 1,837,740 persons
** Estimate the poor is about 30% of total population in 47 poor districts (1.16 mln x 0.30 = 349,176).

8.4.3 Provider payment method

All three public health insurance schemes (i.e. GES, SHI and CBHI in section 8.4.1) have adopted the same provider payment method - a contract model with capitation, though capitation rates were different by scheme. GES is shifting from fee for service reimbursement to capitation, with a capitation rate of 65,000 kip or approximately 6.5 USD per beneficiary per year. SHI's capitation rate is the same as GES. The CBHI capitation rate is 45,000 kip or approximately 4.5 USD per beneficiary per year which is less than those in GES and SHI.

In accordance with the existing three public health insurance schemes, it is justified to apply the same provider payment method – a contractual model with capitation, to pay providers who provide health services to the poor. Therefore, a capitation rate will be used to estimate the total financial requirement for protecting the poor in the next section. The capitation rate will cover both out-patient and in-patient services, since, as found in the previous chapter, catastrophic health expenditure resulted from both OP treatment cost and admission cost.

Even though a contractual model with capitation has limitations and is not a perfect provider payment method (Jegers et al 2002), it is not rationale to propose a different method for supply side financing (e.g. fee for service, DRG – Diagnostic Related Group, or case based payment) from that already in existence.

8.4.4 Financial requirements to serve the poor

Currently, there are two capitation rates; 6.5 and 4.5 USD per beneficiary per year for the three public insurance schemes. Given the restriction of the government budget as well as other country priorities, a capitation rate at 4.5 USD per person per year is used and it should be acceptable to providers when compared to the current financing situation of the hospital – less than 1 USD per capita per year from both the government budget and the fee revenue as reported in table 7.6. Any new scheme would incur administrative cost e.g. training, promoting and implementing including identifying the poor. In this study, the administrative cost was simply assumed to be 10% of the health care costs.

It is assumed that health services delivered to the poor are from the existing health care infrastructure and human resources, ie no new investment. The estimation of financial requirement was based on the additional cost incurred by the poor in getting free care at public health facilities and administrative cost. Apart from the regular MOH subsidy to public providers, the additional financial requirement for serving the poor in option A would be 9.1 million USD per year. Option B would cost less at 1.7 million USD (table 8.3). In 2005, MOH received support at 5.4% of the government budget (Ministry of Finance 2006). When combined with the support for the poor, the MOH budget becomes 6.9% and 5.69% of the government budget for option A and B, respectively.

Table 8.3 Financial requirements to serve the poor

	Option A: The poor throughout the country (about 32.7% of the total population)	Option B: The worst-off in the 47 poor districts
Beneficiary (people)	1,837,740	349,176
Health care cost (million USD)	8.3	1.6
Administrative cost (million USD)	0.83	0.16
Total resources requirement (million USD)	9.1	1.7
• as % of MOHP budget in 2005*	28%	5%
• as % of government budget 2005*	1.5%	0.29%
• as % of GDP in 2005*	0.32%	0.06%

Note * Data from Lao Official Gazette 2006.

8.4.5 Financing sources to support the poor

In this section, three potential financing sources (namely government budget, household contribution and grants or loans) to support the poor are analysed.

Government budget

During fiscal year 2001-2005, the three main sources of government revenues were from tax, customs and state owned asset management revenue (Ministry of Finance 2006). Even though tax revenue is the largest proportion of the government revenue, it was only 7% of GDP in the fiscal year 2001 and decreased to 5% in 2005. The major spending from government budget was for capital investment, nearly half of total

government expenditure. In addition, government had to pay for debt servicing at about 14% of total expenditure in 2005 (Table 8.4).

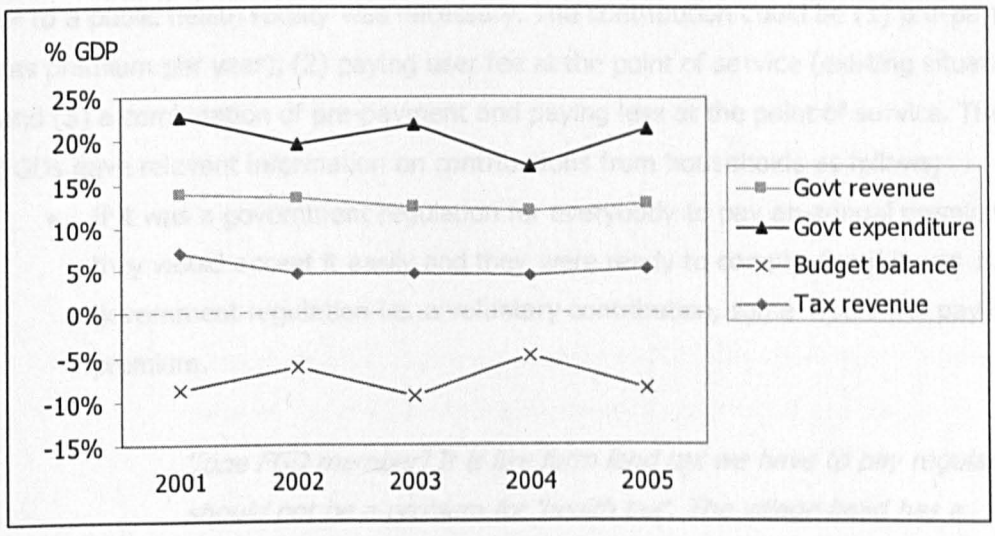
Table 8.4 Revenue and expenditure of the Lao government in fiscal year 2001 - 2005

Fiscal year	**2001**	**2002**	**2003**	**2004**	**2005****
Population[1] (persons)	5,403,680	5,531,110	5,660,579	5,791,695	5,609,997
GDP in real term[1] (million kip)	15,702,000	18,390,000	20,307,000	24,621,000	28,070,093
Exchange rate[1] (kip per USD)	8,955	10,056	10,56910,5	86	10,586
GDP (million USD)	1,754	1,829	1,921	2,326	2,652
GDP (USD per capita)	325	331	339	402	473
Total Government Revenue [2] (million USD)	**242**	**246**	**237**	**279**	**340**
R1. Tax revenue	50%	34%	38%	37%	41%
R2. Customs revenue	13%	24%	27%	31%	32%
R3. State owned asset management revenue	14%	16%	16%	18%	23%
R4. Others*	23%	25%	20%	14%	5%
Gov't revenue (USD per person)	45	44	42	48	61
Total Gov't Expenditure [2] (million USD)	**396**	**358**	**417**	**394**	**567**
E1. Labour related	19%	23%	23%	29%	30%
E2. Program operating	9%	9%	9%	10%	9%
E3. Capital investment	58%	54%	57%	43%	46%
E4. Debt servicing	14%	15%	11%	18%	14%
Gov't expenditure (USD per person)	73	65	74	68	101
Gov't budget balance (USD per person)	**-28**	**-21**	**-32**	**-20**	**-40**

Source: [1] Data retrieved from WHO Lao NHA website http://www.who.int/nha/country/LAO.xls on 10 September 2007.
[2] Data from Lao PDR Official Gazette 2002-2006
* Others refer to land management, capital, electricity and timber royalties
** Data in 2005 was planned figures but data in 2001-2004 were actual figures.

Figure 8.2 clearly highlights that government expenditure has exceeded revenue during 2001-2005. The negative balance budget was around 5-9% of GDP in 2001-2005 which was estimated to be 28 USD per capita in fiscal year 2001 and it increased to 40 USD per capita in fiscal year 2005 (Table 8.4). Main sources for the negative balance budget were from loans at around 181 million USD in 2005 which accounted for 7% of GDP or 53% of government revenue in 2005.

Figure 8.2 Some indicators on government budget in fiscal year 2001-2005



Source: Analysis from data in the Official Gazette, Lao PDR 2002-2006

There are two possible approaches to increase the government budget to health care for the poor; raise more revenue and reprioritize expenditure. Currently, Lao has a low tax burden, 5% of GDP in 2005, compared to its neighbours – Cambodia, China, Thailand and Vietnam at 8%, 15.1%. 15.9% and 13.6% of GDP respectively (Kane, Holmes, O'Grady 2006). Heller (2006) suggested that an obvious option for low income countries is to raise the tax share to at least 15% of GDP. Regarding government expenditure, in 2003 the Lao health sector received only 6.2% of total government expenditure which is low compared to Cambodia, China and Thailand at 11.8%, 9.7% and 13.6% respectively but similar to Vietnam at 5.6% (WHO 2006). In the Abuja declaration in 2001, African governments committed to increasing support to the public health sector to at least 15% of the government budget (WHO 2000). Therefore, it is in theory possible to raise more tax revenue and negotiate to have more government subsidy to the health sector.

Household contribution

As reported in chapter 6, villagers believed that a contribution to government service or to a public health facility was necessary. The contribution could be (1) pre-payment (as premium per year), (2) paying user fee at the point of service (existing situation) and (3) a combination of pre-payment and paying less at the point of service. The FGDs gave relevant information on contributions from households as follows;

- If it was a government regulation for everybody to pay an annual premium, they would accept it easily and they were ready to comply. But if it was not a government regulation i.e. a voluntary contribution, some would not pay the premium.

> *'[one FGD member] It is like farm land tax we have to pay regularly. It should not be a problem for 'health tax'. The village head has a responsibility to collect 'land tax' and remit money to the district treasury. It should be similar....[another FGD member] However, if it is not an obligation to do, I would not like to pay. I am healthy and then I will not pay. But I will pay for my wife who often has symptoms.*
>
> (FGD of the males in SPX)

- All FGDs agreed that an entitled unit must be a 'household', not 'individual'. The premium should cover health services for all members in a household.
- All groups were concerned that the rate of premium must be affordable. They also said that 5000 kip or 0.5 USD per person per year was too small but the amount of 50,000 kip or 5 USD per person per year was too expensive. They preferred 20,000 kip or 2 USD per person per year.
- There were two different opinions on differential charges. For each FGD, around half of members preferred an equal premium rate for every household regardless of economic status because they believed in universality (called *Akkapa*): everyone must do a similar thing, not differ from others. The other half believed that the better-off should pay more and the worse-off should pay less.
- The most important was 'the health card' (either a household card or an individual card) received after paying the premium. The card was evidence that

they had contributed to the health facility which made them more confident to go to see a doctor.

- Apart from pre-payment, paying a certain amount at the point of service was also acceptable from FGDs' perspective.

> *'I expect that a doctor would be glad to receive cash from a patient when he gave treatment. Moreover, he can have more cash to operate a hospital for us. It would be excellent if we pay premium and after that we pay a small certain amount to hospital whenever we go to seek service. I like it. Currently, I never know before how much hospital will charge me which make me worry with unpredictable amount, especially a big bill in a provincial hospital.'*
>
> (FGD of the females in KK)

According to these reasons, two main points were concluded. Firstly, there is room to improve health financial risk protection not only to the poor but also to everyone in the community by a mandatory contribution system endorsed by government regulation. Secondly, contributions from households can be possible in two forms – mandatory premium per year and paying user fees at point of service on the basis of a fixed amount. Collecting a pre-payment premium was feasible using an existing process of collecting tax in the village. Lao culture and belief is conducive to paying something for services received, and there never seems to have been resistance to pay user fees at point of service. There is no harm to keeping small certain user fees at point of service which every one can afford even the poor.

Grant and loan

In the two one-day workshops in Vientiane Capital, the participants who were policy makers, providers and village heads all had the same opinion. They understood the government budget constraint but they did not agree with loans for protecting the poor from health catastrophic expenditure. They would be happy if the government got support from grants either from domestic or international organizations. But financial sustainability should be taken into account. Note that from the workshop, all participants supported the idea of contributions from the community and government budget if the government can afford this.

To sum up, for protecting the poor, it appears justified that the government should take care of the poor and the most feasible financial source is from tax. An insurance contribution from the poor households is not rational and impossible. It is assumed here that the MOH takes financing option A (the poor throughout the country, 1.8 million people) as an ultimate target with a tax-financed budget. In case that the government has severe restriction of the budget, the MOH could immediately implement financing option B (the poor in the 47 poor districts, 0.35 million people) with a tax-financed budget and at the same time the MOH could seek grants to expand to financing option A. However, the government must have a long term plan to guarantee financial sustainability. The government is hoping that the poverty reduction project will reduce the number of the poor.

The households had a strong belief in paying user fees at point of service and would cope with a low payment. It is unnecessary to completely abolish user fees from the Lao health system. A co-payment with a small amount of fees which the poor can afford is assumed for both financing options.

8.4.6 Protecting the less-poor

The main findings in chapter 6 showed that not only the worst-off households but also the middle groups made up the majority of households who faced catastrophic health expenditure. The better-off also had a possibility of catastrophe due to illness costs. Therefore, it can be justified to develop health financial risk protection for the less-poor. The CBHI (Community Based Health Insurance) provides health financial protection to a member who pays a premium. This scheme is a voluntary scheme based on a monthly membership.

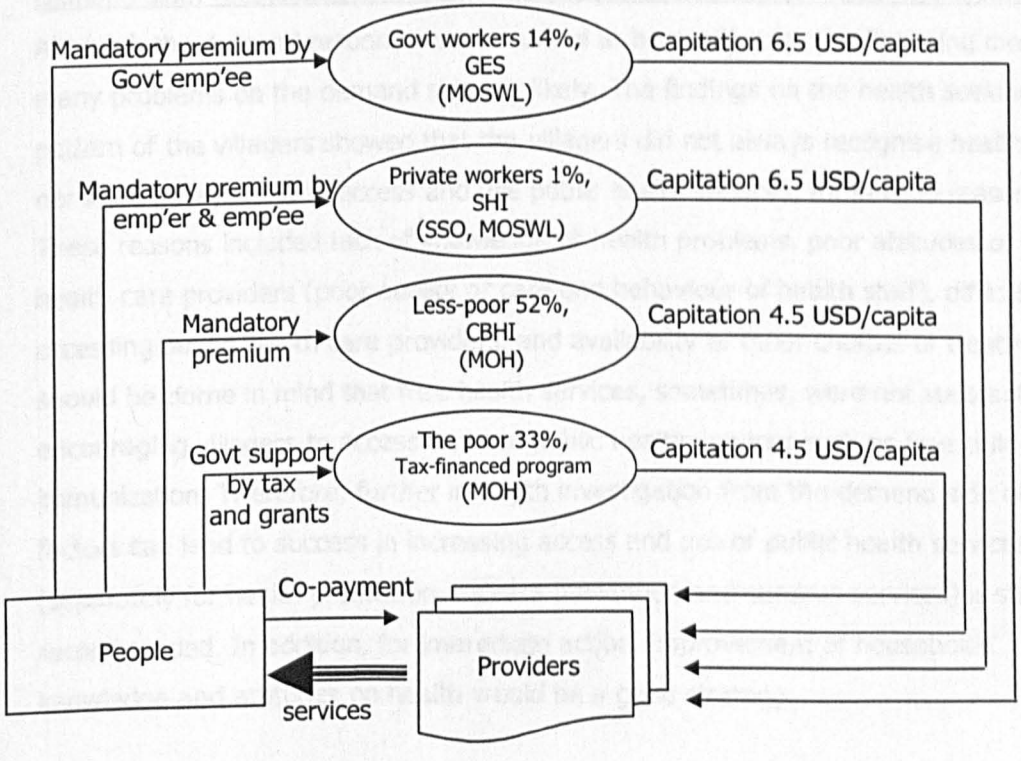
As mentioned earlier, the villagers in the study villages had a positive perspective on contributions involving paying a premium and co-payment. The households and public health providers normally followed government regulations. Therefore, protecting the less-poor appears acceptable and possible by introducing a mandatory contributory health insurance scheme. In order to fit with the existing system, CBHI is the most suitable option by shifting from a voluntary to a mandatory contributory scheme and changing the monthly membership to an annual membership. This can reduce the

administrative cost of collecting the premium and improve the financial sustainability of the CBHI. The new CBHI would cover all people who are not the worst-off and who are not covered by GES and SHI. The annual premium can be collected using the simple existing system – the village head collects the premium along with annual tax and remits the premium to the district hospital of that area.

8.4.7 Health financial risk protection for all

Based on the above proposed elements, all Laotians would be protected from health financial risk through four schemes (figure 8.3). The GES and SHI remain the same. The CBHI covers less-poor people which are the largest group, 52% of total population. The poor at 33% of total population would be subsidized by the government through a tax financed programme for the poor.

Figure 8.3 Model of health financial risk protection for the entire population of Lao PDR



MOLSW: Ministry of Labour and Social Welfare
SSO: Social Security Organization
MOH: Ministry of Health
GES: Government Employee Scheme
SHI: Social Health Insurance
CBHI: Community Based Health Insurance

Govt: government
emp'er: employer
emp'ee: employee
Data in the circle show group of beneficiary, beneficiary as % of total population, name of the scheme and the financial intermediary.

8.4.8 Prerequisites for the further development and implementation of the proposed financing model

The model of health financial risk protection proposed through the analysis in this chapter was mainly tested against criteria of financial feasibility. The financing model assumed the existence of a health delivery system which enables people to access and use services. The financing model thus has three prerequisites; (1) on the demand side, that households can reasonably recognize their health problem and can reach and use public health services, (2) on the supply side, that there is extensive geographical coverage of public health care providers and that they are functioning – able to provide decent quality of care to patients and (3) with respect to third parties, that there is an organization for collecting, pooling finance, and purchasing services, that can successfully provide health financial risk protection for the poor and the less-poor. These three pre-requisites are in this section tested against the realities found in the four villages, their districts, and in the interviews at provincial and national levels.

Demand side: recognition of need for and access to and use of public health services. Although the demand response was assumed to be positive for the financing model, many problems on the demand side are likely. The findings on the health seeking pattern of the villagers showed that the villagers did not always recognise health need, nor were always able to access and use public health services, for several reasons. These reasons included lack of knowledge of health problems, poor attitudes of public health care providers (poor quality of care and behaviour of health staff), difficulty in accessing public health care providers, and availability of other choices of treatment. It should be borne in mind that free health services, sometimes, were not successful in encouraging villagers to access and use public health services such as free child immunization. Therefore, further in-depth investigation from the demand side of what factors can lead to success in increasing access and use of public health services (separately for health promotion, disease prevention and curative services) is strongly recommended. In addition, for immediate action, improvement of households' knowledge and attitudes on health would be a good strategy.

Supply side: implications for health care services

Once people are protected from full or partial fees at point of service, people will probably access public health care providers more often than when they are exposed to full fees. The financing models for protecting the poor and less-poor would increase the workloads of public health care providers, especially for curative care (out-patient, OP, and in-patient, IP, services). The analysis of service output of district hospitals and the provincial hospital in SVK Province showed that the providers had not much workload – an average of about 20 OP visits per day per district hospital and about 2 IP cases per day per district hospital in 2004 (table 8.5). The SVK provincial hospital served 132 OP visits per day and 24 IP cases per day. The providers possibly have potential to increase health care services to the poor and less-poor. However, this is within the limitations of geographical access which were shown earlier. Issues of quality of care and capacity of the existing delivery system (both competency and responsiveness of health staff, and availability of medical device and equipment) were not captured in this study. So, further work is needed to assess the geographical coverage of the current health delivery system and its capacity to provide decent quality of services to the poor and the less-poor. Skilled staffs are required not only for curative services to households but also for improving health education, health promotion and disease prevention programmes.

Table 8.5 Average OP and IP services of hospital in SVK Province, 2001-04

	SVK 4 provincial hospital	Poor district hospitals	10 Non-poor district hospitals
Bed (as of 2005)	160	65*	170**
Average OP visits per hospital per day			
• 2001	128	15	14
• 2002	126	14	16
• 2003	132	14	17
• 2004	132	16	15
Average number of patient discharged per hospital per day			
• 2001	33	2	2
• 2002	38	2	2
• 2003	52	2	3
• 2004	49	2	2
Average length of stay (days per patient)			
• 2001	2.7	3.2	3.2
• 2002	2.7	3.1	3.2
• 2003	2.3	3.3	3.3
• 2004	1.9	3.2	3.0
Average occupancy rate per hospital			
• 2001	56%	56%	37%
• 2002	64%	39%	43%
• 2003	73%	46%	60%
• 2004	58%	43%	43%

Source: Report of SVK Provincial Health Office 2001-2004
Note: * Number of total beds for 4 poor district hospitals
** Number of total beds for 10 non-poor district hospitals

Third party for scheme management

The financing model would require a third party who would manage the scheme for the poor and the less-poor. Currently, the MOH is responsible for coordination of CBHI which covers less than 20,000 members. The existing CBHI unit is in the MOH. The lessons learnt and human capacity of CBHI could be harvested to initiate protection of the poor and expansion to the less-poor. There is no need to invest in a new coordination unit outside the MOH. For the simplest pathway, the MOH needs to put in place a management system for the two new schemes. Since the management system of protecting the poor and the less-poor are linked together, it is practical to implement the financing model in a village by one organization – the MOH. The village committees would be supervised for the wealth ranking to identify the worst-off and then the worst-off would be registered. The remaining households in the village who are not members of GES or SHI would be registered in the CBHI.

The scheme could operate locally through a unit in each provincial/district administration e.g. collecting the premium, registering membership, issuing the card, paying money to providers, and dealing with day-to-day problems at local level. Based on observation at the national level, health staff at the MOH had very good knowledge on health care financing, especially CBHI. They were skilful on CBHI management at a pilot scale. They could provide supervision to the local level. At the provincial level, unfortunately, CBHI was not piloted in SVK Province, so the capacity of health staff to manage CBHI could not be directly observed. However, health staff at SVK Provincial Health Office who were dealing with a pilot project of Health Equity Fund were competent. Furthermore, it was apparent that health staff at local level (at both districts) had sufficient knowledge on health financing and health insurance.

Model testing and further development

Ideally, any financing model should be developed through a participatory process among key partners, especially policy makers. The most plausible model then should be practically tested in real life conditions or piloted on a small scale to find out if it would be successful and what the determinants of success are. Based on feed back from the pilot project, the model would be further developed to best suit it for effective implementation. None of this was possible within the scope of this study, so it remains a desk based modelling exercise.

However, the financing model can be assessed in relation to the actual conditions of the four sampled villages. Based on evidence from previous chapters, the relevance of the financing model is as follows;

- The model is not practical for TAL because of geographical barriers as well as the health seeking behaviour of TAL villagers. Primarily, the condition of the health delivery system must be improved for TAL before the financing model becomes relevant.
- The model might work for KY. The villagers of KY could easily access public health care providers but they preferred private to public providers (see chapter 5). At the same time, the evidence on immunization coverage (figure 4.5 of chapter 4) showed that the public health care provider (the nearest health centre of KY) did not well perform on providing services to patients. Although geographical access was supportive for the financing model, other factors in

relation to health seeking behaviour must be comprehensively investigated and improved e.g. trust in public health care providers, quality of care and the capacity of public health care providers.

- The model is feasible for the two villages in APT district (namely SPX and KK). Conditions of SPX and KK were very supportive for the implementation of this financing model. The health delivery system had extensive geographical coverage in these areas and health staff performed well in terms of immunization coverage (figure 4.5 of chapter 4). From the observation of the researcher, health staffs in SPX and KK areas were competent and had good attitudes on providing health services to patients. The health seeking behaviour of SPX and KK villagers also were supportive for the implementation of the financing model.

Therefore, suggestions can be made for further work. First, the financing model should be piloted extensively in order to investigate feasibility and acceptability to the community (households and local public providers) including the factors that would need to be considered in developing an effective financing model. Second, the model should be further adjusted according to realities from the pilot project. Third, the model should be developed into a financing model for the national level with a process of multi-stakeholder consultation. Fourth, prerequisite conditions of the health delivery system must be achieved before the implementation of the suggested model.

8.5 Overview of the analysis

Based on the findings of the study and given the current context in Lao PDR, the analysis has suggested financing models for protecting the poor from health financial risk. Two models were set from different poverty assessments. Option A, direct targeting, was suggested by using wealth ranking by village committee members and would result in approximately 1.8 million people throughout the country receiving protection. In Option B, wealth ranking would be employed in the 47 poor districts and would result in protection of 0.3 million people. A contract model with capitation was suggested as a payment method to providers to conform with that of the three existing public health insurance schemes. Total resource requirement was estimated applying a capitation rate of 4.5 USD per capita per year plus 10% for administrative cost. Option A required additional resources of 9.1 million USD or 28% of the MOH budget while option B required less – 1.7 million USD or 5% of the MOH budget. It is possible that the government could subsidize the 0.3 million poor people (option B) with a tax-financed budget and then expand to 1.8 million poor people (option A) with temporary support from grants and the government budget phased in in the long run.

In addition to the poor, it is possible to protect the less-poor with a contributory scheme by transforming the current CBHI into a compulsory scheme. The premium could be annually collected from the households who are not the poor, GES members and SHI members using the existing system of tax collecting by the village head. Attitudes of households suggested that it is worth having co-payment at point of service for both the new scheme for the poor and for the less-poor. The MOH was suggested to be the organization to manage these new schemes. Under these proposals, the Lao PDR would achieve health financial risk protection for its entire people. Nevertheless, based on the village study, it was apparent that the existing health system was not fully supportive for the financing model. It is necessary that prerequisite conditions (on both demand and supply sides) must be achieved for the implementation of the financing model to be feasible and appropriate.

8.6 Discussion

The financing model

The study has explored financing model options for protecting the poor and less-poor. The suggested national model implies that almost all user fees at point of services would be transformed to a prepayment system for treatment at public health providers. A small amount of co-payment would be kept at point of service. The suggested national financing model would thus result in user fees at point of services mainly being removed from public health providers. This essentially requires stewardship at all levels of key stakeholders; national, provincial, district and village levels. Gilson and McIntyre (2005) suggested that before fees can be removed, the health care budgets must be sufficiently increased in order to protect quality of care in the face of increased workloads. After the abolition of fees in Uganda, it was found that utilization of public providers increased largely among the poor, but with no clear change among the non-poor (Xu et al 2005). Although the poor could access free care, surprisingly, the incidence of catastrophic expenditure among the poor did not fall (Xu et al 2005). This was because of frequent unavailability of drugs at public providers and households had to pay for medicines outside public providers.

In order to achieve the policy objectives, seven practical strategies were recommended for managing fee removal (Gilson and McIntyte 2005). These strategies are used here, drawing on the evidence from the study, as a framework for discussing the feasibility of the proposed financing model at national level (table 8.6).

It is apparent that many issues need high attention from the government e.g. the rapid development of the CBHI office in the MOH, promulgation process, public information campaign, medicine management system, improving of physical access, and monitoring system. Some current conditions in Lao PDR would benefit policy implementation. For example, local funds already exist in every hospital.

Table 8.6 Practical strategies for managing fee removal

Practical strategies for managing fee removal *	Situation in Lao PDR **
(1) set a specific unit for coordinating	(1) The study suggested that MOH takes this role because of experiences of CBHI. Nevertheless, a rapid improvement of the CBHI office in the MOH is needed.
(2) dialogue clearly on policy goals with health workers	(2) Promulgation of Decree 52 and any decree was very weak. The government needs to put in more effort.
(3) establish local funds to support the activities	(3) The current system of decentralization could enable local funds. The local levels have their own flexibility to manage the funds.
(4) promote public information	(4) The experience of Decree 52 showed ineffective public information and thus led to mis-understanding of entitlement to exemptions. The government must give high attention to public promotion campaign.
(5) ensure adequate medicines and medical supplies to deal with increased utilisation	(5) The experience of RDF at village level showed poor medicine management. This might need more training, supervision and evaluation of RDF management at all levels.
(6) to improve physical access to health services through 'close to client' services	(6) This could be newly established (e.g. home based treatment programme through mobile health workers) or strengthen current means (e.g. through VHV, TBA). Importantly, the conditions from both demand and supply sides must be comprehensively assessed in order to improve access and use of public health services.
(7) establish monitoring systems for useful information	(7) The monitoring system of the government budget is more effective than for user fee revenue. A system similar to that of the government budget could be applied.

Source: * Modified from Gilson and McIntyre (2005)
** Assessment by the researcher

The study suggests that the MOH and a unit in each provincial/district administration should take responsibility for managing the two new schemes. It did not promote the idea of the purchaser-provider split by setting up a new organization. In practice, it is far from clear that the experiences of SHI purchasers which applied a purchaser and provider split suggest that they performed effectively (Wagstaff 2007c). At the same time, however, a government organization does not guarantee successful implementation. It is hoped that the MOH would operate responsibly and be more accountable because the schemes would be dominated by the mandatory contributory scheme of the less-poor (52% of the total population) plus the tax-financed programme for the poor (33% of the total population).

Finance

The study suggested a tax-financed programme for the poor and a mandatory contribution for the less-poor. The financial estimations for the poor were calculated from a capitation of 4.5 USD per person per year. In fact, there are two capitation rates – 4.5 and 6.5 USD per capita per year, among public health insurance schemes in Lao PDR. From an equity perspective, different capitation rates should be monitored for their quality of care implications for different groups of insurance members. In future, the capitation may need harmonization. Co-payment would be newly applied to the poor and the less-poor schemes. It should be monitored in order to ensure that it will not be a barrier of access to and use of health services.

In terms of the financial implications of the financing model, the analysis of financial requirements was based on an assumption that there would be no new investments in health care infrastructures and human resources. It was assumed that patients could practically access and use public health facilities. However, the study found that some households had problems of geographical access, especially in the poor district, and then suffered from death or disability. It is assumed that the infrastructure of health provision would be expanded according to the master plan of the MOH in 2005 and NGPES 2005.

Wealth ranking

The analysis suggested approaches for identifying the poor using (1) direct targeting by wealth ranking in the village and (2) geographical targeting of the 47 poor districts combined with the wealth ranking. The study found a possibility of conducting a wealth ranking by village members in the 4 villages studied, and acceptability of two schemes (the poor and the less-poor) in 2 villages. However, the sample size was tiny compared to the total of 3,649 villages in 47 poor districts. Expanding the study to a larger sample size is needed to assure the efficacy of wealth ranking and acceptability to villagers of two schemes within villages. Testing of wealth ranking and PCA analysis on assets of households is required to be more confident that wealth ranking can differentiate the worst-off from the better-off.

It was proposed that wealth ranking could be done by village committee members, not by an individual person (the village head), in order to ensure accountability of the

wealth ranking process, to encourage community participation and to gain acceptability of the villagers. Nevertheless, experience of direct targeting in other countries, e.g. Thailand where income assessment was used to issue low income cards to the poor, showed that there was under-coverage and leakage (Gilson et al. 1998). It was mentioned that the effectiveness of income assessment was influenced by many factors i.e. the political context, actors, design and implementation strategy. Hence, the process of wealth ranking would need huge effort to guarantee its success and effectiveness. It requires clear procedure, training and coaching on implementation. Good practice guidelines would inhibit personal bias. The process could cooperate with the Poverty Reduction Fund which had experience of identifying poor districts in NPEGS.

8.7 Concluding remarks

This chapter has provided suggestions on a financing model which could improve health financial risk protection of not only the poor but also the less-poor, a group beyond the initial objectives of the study. The main findings and lessons learnt in the empirical study were used to develop a suggested financing model, for example; justification for providing both OP and IP services in the benefit package due to household catastrophic expenditure from a small amount of health care cost, and argument for expanding financial protection to the less-poor because of catastrophic expenditure in better-off households. The analysis of financial implications mainly relied on the current situation in Lao PDR in order to suggest the most feasible options based primarily on financial feasibility.

The study suggested that the MOH should aim to protect the worst-off households throughout the country with subsidization from the government budget, and the less-poor by household contribution. Wealth ranking by the villagers was suggested as a tool for identifying the worst-off households. Many characteristics of the current CBHI were employed e.g. a contractual model with capitation rate of 4.5 USD per capita per year and the CBHI unit in the MOH to manage the new two schemes.

However, the suggested financing model is based on (1) only a small sample of households and public providers and (2) assuming a reasonably supportive health delivery system. Therefore, it is necessary to study further both households and providers with a larger sample size in order to assure feasibility and acceptability of the financing model. The process of constructing the financing model at the national level should involve all key actors in financial health protection, for instance the Ministry of Finance, the MOH, the CBHI unit, public providers and donors. Prerequisite conditions of the health delivery system are required prior to implementation of a model for financial protection of the poor and the less-poor.

CHAPTER 9
DISCUSSION

9.1 Introduction

The study aims to contribute to health financing policy on financial protection of the poor by improving understanding of health care utilization determinants and the success of mechanisms for protecting the poor; evaluating government policy and practice on fee exemption of the poor; and identifying ways of better protecting the poor. The conceptual framework of the study was developed by integrating five main concepts. Determinants of supply and demand of health services were adopted as a means of assessing responses and perceptions towards exemption policy from three main stakeholders in the health care financing system; policy makers, public providers and households. Concepts of health care seeking behaviour based on the Andersen Model were used to explain health service utilization of households. Categories of coping strategies were adopted to understand how, in practice, households deal with cost of illness. Concepts of exemptions under the user fee system and performance of protection mechanisms were applied to assess the implementation of the exemption policy. Both quantitative and qualitative methods were employed for data collection from the various stakeholders from national level to community level.

This chapter discusses the strengths and weaknesses of the methods used in the study. It also summarizes and discusses the findings of the study and the suggested financing model for protecting the poor and the less-poor.

9.2 Methodological issues

Several quantitative and qualitative approaches were used in this study in order to respond to all the objectives and indicators. Village census, consumption survey, focus group discussion, in-depth interview, key informant interview, document review and secondary data collection were chosen to complement each other. Strengths and weaknesses of each approach will be discussed and followed by broader methodological issues relating to the study.

9.2.1 Quantitative methods

Village census

A village census was conducted in all four sampled villages. Household interviews using a structured questionnaire were carried out in every household. This was possible because the number of households in each village was not large (ranging between 34 and 62 households in each village). The village census has several major strengths. In general, survey data provide a good overview of households in a community. The village census has advantages over a sample survey because it provides a snapshot of the whole village, not just the sampled households. The village census was extremely useful for the study for the following reasons.

- The village census provided an equal opportunity for every household to participate in the study. The villagers were very sensitive about having a chance to participate in the study. A limitation of a sampled household survey and qualitative methods is that they are not able to include every household in the study.
- It was a highly successful strategy for building rapport with the villagers.
- During the village census, interviews were conducted with every household, in the house itself. It was a good opportunity to meet every household head and observe the status of every household before conducting wealth ranking.
- Information on the assets of each household was useful to compute the asset index score in order to find the correlation with wealth ranking by FGDs.
- The village census illustrated the whole picture of the village which prevented bias in selecting sample households for the household survey.

The village census was successful, with 100% participation and enthusiastic cooperation from every household. Almost all household members were present and gave individual information. This was because the village head had informed households in advance to stay at home. It should be noted that the fieldwork was conducted during the dry season when the villagers stay in the village. During the rainy season they stay in their farmhouses and it would have been extremely difficult to conduct a village census or household survey. However, conducting a village census requires huge time and labour resources so it could be conducted only in a limited numbers of villages. The small number of sampled villages was one limitation of the

study. This inevitably limited the number of villagers who had experience of accessing health services, especially admission.

Health care utilization and cost of treatment

As mentioned earlier in the methodology chapter, four villages were chosen from two districts which were selected because they had a relatively high utilization rate at the district hospital. This could have led to bias towards high accessibility to public health services, and potentially a high cost burden of health expenditure to household consumption. However, it was not intended that the study should estimate the overall utilization and cost burden of the entire population. The study was aimed at gaining better understanding of how households reacted to illness.

The study focused on the direct costs of illness but did not consider indirect costs e.g. production loss caused by illness. Indirect costs can exceed direct costs (Koopmanschap and Rutten 1994) and this was the case in Lao PDR (Dunlop et al 2004). Sauerborn et al (1995) studied rural Burkina Faso and found that indirect costs were the largest component of total costs of illness. Indirect costs can lead to significant economic consequences for households, especially when a breadwinner is ill or a household member is very sick and requires long-term care such as for malaria, TB and HIV/AID patients (Russell 2004). Indirect costs when combined with direct costs of illness can push a household into poverty or into deeper poverty (McIntyre et al. 2006).

Not capturing the indirect costs of illness was a weakness of the study and it meant the capacity of the study was limited to understanding only the impact of direct costs of illness to households and subsequent household responses. Nevertheless, measuring indirect costs of illness is not easy and has methodological challenges both in the operational definition of indirect costs and quantifying them in monetary terms (Russell 2004, McIntyre et al. 2006). Therefore, this is one of the suggestions for further research.

Household economic status

One of the greatest problems in the quantitative approach was measuring household economic status. Classifying non-poor and poor households by quantifying income,

expenditure or consumption in every household during the village census is time-consuming and requires many resources. Even if it is the gold standard when done very well, the study could not afford the associated costs. Therefore, wealth ranking by FGDs was applied in the study.

Household consumption was then measured in sampled households in each wealth group. Neither household income nor expenditure was used due to various limitations. Generally, there was likely to be under-reporting of income and over-reporting of expenditure. According to the ILO definition, household expenditure is the sum of household consumption expenditure and non-consumption expenditure e.g. compulsory transfers to governments (direct taxes, for example), social security contributions (International Labour Office 2003). Asking about taxes paid by households might lead to less cooperation and create difficulties for the study. Measurement of household consumption is considered by the World Bank's poverty specialists to provide a far better indicator of living standards than income data (Wagstaff 2000). In addition, in the context of the study, household consumption was more appropriate because villagers were engaged in the agricultural sector and lived in a subsistence economy. All villagers reserved their own rice products for in-house consumption before trading the surplus. They normally sought food from natural resources. It was less complicated to quantify the value of goods and services the household consumed by using prices from the nearest market.

Secondary data collection

Collecting financial information on health care providers and the government from secondary sources is the most effective approach as the reports have already been produced. However, weaknesses were identified. The validity and reliability of secondary data were doubtful. The figures might be misleading if the interpretation was made without caution or true understanding of their meaning. This study tried to reduce this problem by two approaches; (1) requesting official reports which had previously been approved by the organization authorities and (2) triangulating the data with other sources e.g. key informant interviews or requesting an explanation about the figures in the report from staff who had produced it.

9.2.2 Qualitative methods

Three qualitative methods were employed. Focus group discussion, key informant interview and household in-depth interview were used for collecting data from households. Key informant interviews were used in the public health facilities and with the policy makers.

The qualitative approaches provided in-depth information for better understanding of particular topics, for example explanations of the consequences of catastrophic health expenditure on the household economy or how and why the MOH did or did not support the providers who granted exemptions to the poor. Qualitative methods were used with the aim of answering questions of how and why which could not be answered by a quantitative method.

Sample sizes for the qualitative approaches were small. They were not intended to be statistically representative but aimed to strengthen understanding of in-depth information. The sample size was of less concern than the thinking generated for particular topics. One possible action to support an in-depth understanding from qualitative approaches was to cover every level of involved partners and to sample as many individuals as possible. Regarding policy makers' perspectives, the informants were purposively selected to cover a great number of informants with different positions from the top of the MOH to the policy makers at provincial level, and covered ex- and current policy makers. Regarding public providers' perspective, every level of health facility was selected from central hospital, provincial hospital, district hospital and health centre. District hospitals were chosen from the poor and the non-poor districts. Regarding households' perspective, in each village, key informants were the most knowledgeable members of the village committees. FGDs were conducted in three different groups of people (village committees, males and females) varying from young to elderly. Households for in-depth interview were purposively selected to be typical of a range of illness experiences (OP and IP) and death and three wealth groups (the better-off, middle and the worst-off).

The study employed many qualitative methods and each method covered a number of samples. These enabled the study to cross-check the validity and reliability of

information. For example, key informant interviews of village committee members in a village usually covered about 6-11 members and they reminded each other of events and verified each other's answers. Information on wealth ranking of one FGD was verified by the results of other FGDs. Perceptions of villagers on user fees and exemptions were collected by FGDs in general and household in-depth interviews on a particular experience of illness in the household. Then perception of households towards user fees and exemption from FGDs and household in-depth interview supplemented each other and were triangulated.

9.2.3 Broader methodological issues

The strength of this study was its design to cover three main stakeholders; policy makers, public providers and households from the national level to community level. However, the sample size of households was small (172 households of only four villages) and located only in the 'rural without road' area. Owing to resource and time limitations, it was not possible to cover all three areas of Lao PDR; urban, rural with road and rural without road. Limiting the study on the household perspective to only four villages of two districts in one province made it possible to go into some depth in understanding of household experiences relating to access to health services and health financial protection e.g. the importance of the community network to support the poor, the impact of catastrophic health expenditure on the household economy and reasons why people did not take up exemptions.

After completion of the fieldwork, the findings were presented at two one-day workshops in Vientiane Capital, Lao PDR on 17-18 July 2006 to share and verify the preliminary results with policy makers, public health providers and heads of the four villages. All participants accepted the findings. Judging that Savannakhet Province has a stronger health delivery system and is of higher economic status than other provinces in Lao PDR, they felt that among both households and public providers, exemption practice would be greater than in other poorer provinces.

Based on the Household Economic Approach (Seaman 2000), this study designed a specific approach, using multiple methods, to measure household consumption, a crucial parameter for measuring catastrophic health expenditure. These multiple methods were practical and effective.

The study design, which combined qualitative and quantitative methods, facilitated both measurement of the magnitude of expenditure and in-depth understanding of how these expenditures came about and influenced household economic status, as in the study by Russell and Gilson (2006). Employing a combination of several methods enabled the study to cross-check the findings from one method with another. Results from different methods also supported the consistency of results obtained by other methods and supplemented each other. For example, the village census presented the

number of households which did not access or use health services when ill whereas the household in-depth interview explained the negative outcomes (death or disability) the households experienced due to the inaccessibility of public health services.

Wealth ranking by FGDs can practically represent the wealth status of households and can be used to examine equity in the health system. This study found inequities among wealth groups in reported illness, use of health services, and cost burdens. However, almost all studies of equity in the health system divide households into different wealth groups or socio-economic groups using quantitative data (O'Donnell et al. 2005; Van Doorslaer et al. 2005; Limwattananon et al. 2005; Sepehri et al 2005; Thi Thuan et al. 2006; Chuma 2007)

The study had the flexibility of modifying tools during the fieldwork in order to allow questions that were better suited to the real situation. The results from the first and second villages showed that villagers had never known about exemptions from public health care providers so had no experience of asking for them. Questions in FGDs for the third and fourth villages were changed from a process of asking for exemptions to asking about the way of protecting the poor and less-poor. The study then learnt villagers' perceptions about voluntary versus compulsory health financial protection, their willingness to pay the premium and co-payment. This information was relevant and useful for the alternative ways to protect the poor and the less-poor from illness costs.

Using a variety of approaches from quantitative and qualitative methods for every level of data sources (national to community level) also facilitated greater in-depth investigation of the problem. The study found that three main stakeholders had a different interpretation of 'the poor' who would be entitled to exemptions. The village census showed that no villagers had known about exemption policy except one village head and VHV. Interviews illustrated that the village head and VHV had been trained to understand that exemptions were for 'the destitute', not for 'the poor' and they now firmly believed this. FGDs revealed that the villagers interpreted that they were 'the poor', not 'the destitute' and were therefore not eligible for exemptions. Interviews with the providers in SVK demonstrated that they had the same idea as the villagers. The SVK providers explained that they had limited resources so they must limit the

amount of exemptions by restricting the number of eligible people. However, interviews with the policy makers found that they thought 'the poor' and 'the destitute' had the same meaning. All the information above, obtained by several methods, provided a better understanding on this particular issue of exemptions which might not have been possible to capture by one method.

The study design allowed information to be presented on short-term cause and effect, but not for long-term cause and effect. The village census collected cross-sectional data of household experiences on illness in the previous two weeks and hospital admission in the previous twelve months. Household in-depth interviews were conducted at one-off visits, not longitudinal interviews. They, therefore, were not able to capture multiple illnesses over time such as treatment for chronic diseases in a household, and it was not possible to assess the long-term consequences of health care costs on household livelihood. Although the study design presents a static picture of the impact of health care costs on the household economy, interviews of households at least provided some sense of change over time. For example, a household head sold a cow when his daughter was admitted to hospital in the previous twelve months but at the time of the interview, he had earned money and now owned a new cow. Thuan et al. (2006) indicate that, in developing countries, catastrophic health expenditure is usually the result of a 'series of events' which relate to every-day illnesses rather than one single spectacular event e.g. an injury. In addition, Russell and Gilson (2006) emphasize the importance of longitudinal study research in order to explain the relationship between illness cost and livelihood change over time. They indicate that the consequences of illness on household impoverishment and livelihood depend greatly on the severity, frequency and duration of the illness.

The researcher has a background close to Lao culture as she graduated from a University in the North east of Thailand and worked in that area for many years. As stated earlier, she has previous experience of conducting studies in the Lao health system. She understands specific cultural aspects, for example the hierarchical structure of Lao society. The fieldwork was carefully organized according to the formal and informal recommendations of Lao partners, especially recognized people. Those recommendations involved not only the study protocol (e.g. who should be met first, in what way and how) but also involving the living style of the researcher (e.g. clothes,

hair style, eating habits, participating in social events in Lao, etc.). These could enable an effective relationship amongst the researcher, RA, local administrator (LA) and respondents. All respondents had willingness to participate in the study – there was no refusal from any respondent. Respondents actively involved themselves in the study and also recommended the researcher to other key informants.

Nonetheless, as mentioned before, the researcher and RA and Lao counterparts held positions of government officers in the public health system of Thailand and Lao PDR, respectively. Every respondent was told this before the interviews. The respondents possibly exaggerated their poor situation. However, this information could be triangulated with solid evidence. Experiences and perceptions of the respondents on exemption policy implementation could be cross-checked by many means e.g. checking among the participants during interviews, cross-checking within the research team, and triangulation of data across participants and reconfirmed with other participants.

9.3 Overview of findings

The overall main findings of chapter 4-8 are summarized in this section, starting with households' experiences of service utilization and financial implications of illness costs. These experiences reflect the ineffectiveness of the exemption policy implementation on financial protection for the poor. The second sub-section explains the exemption policy implementation and providers' responses which could mirror the factors that inhibited successful policy implementation. The last sub-section presents the suggested financing model for improving financial protection for the poor and the less-poor.

9.3.1 Health service utilization and financial implication for households

The four sampled villages were located in a rural area of SVK province. The villagers had difficult living conditions - a consumption level of less than 1 USD per person per day, hunger, poor infrastructure and poor hygiene and sanitation.

When the villagers were ill, many of them did not seek any health services. When they sought care, they preferred to use the local facilities. Public health services were not the preferred choice for OP treatment, but were popular for admission. Treatment seeking behaviour was determined by many factors i.e. values concerning illness, attitude towards health services, cultural beliefs, physical access to health services and financial capacity of households. Service cost at public providers was more expensive than at the local and private providers. The villagers dealt with cost of health services themselves using many coping mechanisms within the community e.g. using savings, selling assets, borrowing, delaying payment at providers and getting support. Some households could cope with treatment costs. However, some could not and faced catastrophic expenditure and were then impoverished.

In terms of equity, there were differences in levels of reported illnesses, service utilization of all provider types and catastrophic expenditure by wealth group and by area of residence. The villagers in the worst-off group and those in the worst setting reported higher rates of illness. It seemed that the villagers in the worst-off group and those residing in the poor district had more frequent OP visits. In contrast, the worst-off group and the villagers residing in the worst setting had less probability of

admission. Catastrophic expenditure could happen across all wealth groups and area of residence, but it was more concentrated in the remote village, especially the worst-off and middle groups.

The national policy on user fees and exemptions at public providers (Decree 52 PM) was officially implemented in 1995. The villagers firmly accepted paying user fees to the public providers. However, almost none of them were aware of the exemptions and those who were aware, believing themselves to be 'poor' and not 'destitute,' thought they were not eligible for exemption.

9.3.2 The exemption policy implementation and providers' responses

The content of Decree 52 PM itself was unclear, for example, there was no stated objective of introducing user fees. The policy was not successfully promulgated. Many health staff did not clearly understand the exemption policy. The main issue was that fee revenues were a major part of hospital finance. Some of the fee revenues had to be remitted to the local governor. In the case of exemptions, the hospitals had to finance them from the fee revenue, without subsidization from the government budget. The MOH never submitted a budget plan for the exemption to the government due to lack of the clear criteria for the poor needed to estimate the budget. In practice, the providers always urged patients to pay user fees, even if patients had attestations affirmed by the village heads to declare they were poor and entitled to the exemptions. The providers would allow patients to delay payment (time exemptions) and they would provide money exemptions to the destitute (although the destitute were rarely found at this time). This resulted in a tiny proportion of fee revenues being spent on exemptions. Most of the exemptions benefited government employees, especially hospital staff, while the poor got many fewer exemptions.

All public providers in SVK province had the same understanding as the households that the exemptions were for the destitute (who had neither assets nor relatives), not for the poor (who still had either assets or relatives). The providers in VTE Capital and the policy makers perceived that the meaning of 'the destitute' was similar to 'the poor' and the terms could be used interchangeably.

9.3.3 Improving financial protection for the poor and the less-poor

The data from the two sub-sections above indicate that the national policy on exemptions for the poor was ineffectively implemented. The villagers, especially the poor, lacked awareness of the exemption policy and they managed household crises due to the costs of health services themselves. Some of them faced catastrophic expenditure and some had financial hardship.

By analyzing the evidence from the study and the current context, a tentative plan for a scheme could be developed to assess the financial feasibility of financial protection not only for the poor but also for the less-poor. The scheme for the poor could initially cover the poor in the 47 poor districts (about 0.3 million people) and then later be expanded to cover the poor throughout the country (about 1.8 million people). Wealth ranking by village committee members could be used to identify the poor. After the wealth ranking, the rest of the villagers who were not entitled to the GES and SHI schemes could be registered in the scheme for the less-poor. The current CBHI could be transformed to be a mandatory scheme for the less-poor and be financed by household contributions, which would be possible in the two sampled villages. The contractual model with a capitation rate of 4.5 USD per person per year of the current CBHI was used to estimate the total financial requirement for the poor. In order to support the health service for the 1.8 million people, it would require additional resources of 9.1 million USD a year. The additional resources for the poor, together with the government budget for the MOH, accounted for 6.9% of the total government budget in 2005. The government budget could be sufficient to finance the poor. Co-payment at point of service was suggested for these two new schemes. The MOH was suggested to be responsible for the new two schemes. By establishing the schemes for the poor and the less-poor combined with the current GES and SHI, the entire population could have financial risk protection.

However, the suggested financing model could be readily applied to only two of the study villages, and conditions in the other two study villages were less conducive to the success of the model. In order to make the financing model practical, the Lao health system must achieve the prerequisite conditions from both demand and supply sides.

9.4 Discussion of findings

This section discusses the overall findings of the study and is divided into three sub-sections, in line with the three sub-sections presented in the previous section. The first sub-section focuses on illness, health utilization, cost of services and coping strategies of households. The second sub-section discusses experience in implementing the user fee and exemption policy in relating to its roles in protecting the poor and factors influencing its effectiveness. The last sub-section discusses the way forward for better protecting the health financial risk for the poor and the less-poor.

9.4.1 Health service utilization and financial implication to households

Health service utilization

The Behavioural Model by Anderson (1968) was used to structure data collection. It argues that use of health services is dependent on individual determinants and they are categorized into three components: (1) the predisposing characteristics, (2) enabling resources and (3) illness level or need. The village census presented patterns of health care utilization of individual villagers. The findings indicate that health-seeking behaviour differed by wealth group and area of residence. The interview data explained some factors influencing the decision making of the villagers on health care sought. These determinants found in the study could be classified into three components as follows;

- The predisposing characteristics. The study did not test whether or not use of service depended on demographic data (e.g. age, sex and marital status) due to the small sample size. The study found social structure and beliefs were related to the use of health services. The villagers in KY had a good opinion of the ex-head of the nearest health centre and they continued seeking care from him. On the other hand, some villagers felt they were not familiar with health staff and then it made them reluctant to seek care or to ask for delayed payment. Ethnicity directly influenced choice of care. *Heet* was adopted in the hope of relieving the symptoms of *Lao Theung* patients, but not *Lao Lum*. Montenegro and Stephens (2006) used a few of these four criteria, namely cultural, political, spiritual and ecological aspects to define indignity and they

reported that indigenous people in Latin American countries have higher rates of mortality and morbidity than non-indigenous people. Ethnicity in Lao PDR is at least in part classified by ecology (as seen by their name which means low land, mid land and high land), and the thesis confirms the suggestion of Montenegro and Stephens (2006) that ethnicity can be one of the determinants of access to and use of health services.

- The enabling resources. It was quite clear that ability to pay user fees was the major concern of the villagers. They strongly believed in paying user fees from their own pocket. They were not aware of the exemptions at public health providers. They complained several times that they did not have enough cash to go to public providers and were extremely worried about expensive care at the provincial hospital. The worst-off group were less able to access admission than the better-off. Price of services potentially related to choice of care. Costs of services at public health care providers were expensive (both transportation cost and service cost) compared to local providers (no transportation cost and fewer service cost). Meanwhile, public health providers were the least frequently used for OP treatment by the villagers and the local providers were the most frequently used. The geographical character of the village definitely affected decisions on the health care sought. Patients in TAL, the most disadvantaged village in terms of access to public health providers, had the lowest use of hospitalization while those in KK, the most advantaged village, had the highest. In addition, TAL patients sought care from several providers before being admitted to hospital. They tried to relieve symptoms from whatever source they could. They considered the public health providers as a last resort.

- The illness level or need. Villagers were often heard to say that it was not serious or it was simple symptoms or the patient would naturally recover by doing nothing. This implied a lack of awareness of symptoms or diseases by the villagers. Although the study did not have an in-depth investigation of the root cause of villagers' perception, it could be predicted by the social structure of the villagers that they lacked knowledge of diseases and were unaware of the potential value of treatment.

The decision on health care sought could be determined by a single factor but, normally, was determined by multiple factors which were interrelated (Anderson 1995). These determinants could result in differences in inclination for health care use. For example, households who strongly believed in the efficacy of treatment of their health staff, e.g. an ex-head of health centre in KY village, sought care sooner than those with less faith in him. On the other hand, a household in-depth interview of SPX 6 (Box 6.4) presented a negative result of using health services. The household head did not seek care for his son and then he died. It was because of three determinants; disposing factors (was not familiar with health staff), enabling resource (lack of cash and transportation), and need (not serious condition). The main determinants of access to and use of health services of the villagers were not only physical access and user fees but also other factors such as ethnicity, attitudes toward health service, knowledge about disease, and perception of illness.

Household coping strategies

The villagers were not aware of the exemption policy and did not use it. They financed health care cost themselves with many types of coping strategies as noted earlier. The cost of OP treatment was normally smaller and could be more easily managed than the cost of admission. Some households adopted a single coping strategy but some applied multiple coping strategies. The study was able to describe only the 'type' of coping strategy for each service. It was not designed to investigate details of other dimensions of the coping strategies such as the sequence of different strategies, the level at which the strategy would be applied and the success of coping behaviour in terms of calamity aversion, minimizing adverse effects on household production and preserving household assets, as assessed by Sauerborn et al (1996). The study focused on the financial cost of health service and ignored indirect cost of services i.e. time costs. Therefore coping strategies of the study responded to the financial costs only, not the time costs which could be a larger proportion than financial cost, as discussed earlier.

9.4.2 The exemption policy implementation and providers' responses

Promoting access for the poor under a user fee system

User fees at government health providers can deter patients from accessing and using health services. Russell and Gilson (1997) recommend two key approaches to promote access for the poor within a user fee system. The first approach is 'perceptible service improvements'. Russell and Gilson argue that under the user fees, users would not decline to use the service when they valued it more highly than the money paid. Two supporting conditions for service improvements were a decentralized financial control which allowed retention and use of revenue at the hospital and policy guidelines for promoting service improvement to benefit the poor. The second approach is 'carefully designed fee schedules with exemptions'. An effective implementation is required.

The findings of the study revealed that the poor in Lao PDR were likely to get less benefit than other population groups under the user fee system. Regarding the first approach, decentralized financial control was implemented at the local level and hospitals had flexibility of use of fee revenue but the government lacked policy guidelines for health provider management which supported the conversion of fee revenues into service improvement that benefited the poor. There was uncertainty as to whether the poor got benefit from fee revenues or not. The poor were less able to access public health providers. Nevertheless, to some extent, when the poor could access and use public health services, they could probably benefit from the availability of medicines in hospitals which were replenished by fee revenues and services provided by health staff which were partly paid for by fee revenues. For the second approach, the government never had guidelines for setting up fee schedules and the policy which exempted those unable to pay was inefficiently implemented, for many reasons which are discussed in the next sub-section.

Factors influencing the effectiveness of exemption policy in practice

The problems which have limited the success of the exemption policy in Lao PDR can be grouped into four themes: information, administration, resources, and socio-cultural and political constraints, as suggested by Gilson et al. (1995) and they are summarized in table 9.1.

Table 9.1 The determinants limited the success of Decree 52 implementation

Four groups of problems limited the success of exemption policy implementation *	Lesson learnt from the exemption policy in Lao PDR **
• Informational constraints	• Unclear content of the policy – no policy objectives • Lack of criteria to identify the poor • No clear guidelines for implementation
• Administrative constraints	• Weak promulgation strategies • No supervision from the MOH to local level • Lack of system for monitoring and evaluating
• Resource constraints	• No government support for the provider who granted exemption
• Socio-cultural and political constraints	• Different understandings on definition of eligible people among policy makers, providers and people • Policy got an endorsement but might lack political commitment

Note: * Based on Gilson et al. (1995)
** Findings from the study

Informational constraints. The MOH lacked the necessary information to define explicit criteria for identifying the poor so this was missing from the exemption policy. Decree 52 PM stated that the poor or the low income group, using an attestation affirmed by government offices or village heads, would be exempted. Lack of explicit criteria created problems of interpretation between public health providers and patients. This resulted in the providers examining the economic status of patients and making their own decision on granting exemptions to the poor, even if they had an attestation from the village head.

Administrative constraints. The policy had been promulgated from national level to providers and village levels through routine channels without serious consideration. This resulted in some health staff not clearly understanding the user fees and exemption policy. The local providers lacked supervision by the MOH and then there were great variations of understanding, interpretation and practice on user fees and exemption e.g. remitting obligatory remittances to local coffers, concepts of granting exemption to 'the destitute', not 'the poor', different reporting styles. Each hospital had its own understanding and modification of reporting user fees and exemptions which led to inaccurate figures on exemptions to the patients. In addition, the existing financial report template was unable to display whether the poor got exemptions or not.

Resource constraints. The fee revenues were significant for public providers, especially for provincial hospitals (two thirds of the total hospital revenues) and district hospitals (one third of the total hospital revenue). Providers mainly spent revenue on replenishing medicines in the RDF. Revenue from user fees was useful for items which were not affordable within the government budget such as buying a computer, maintaining equipment and paying incentives to hospital staff. The providers had to cover the cost of exemptions from their own revenue; no government budget subsidy was given to hospitals. This resulted in a small portion of exemptions being granted (4% of the total expenditure from user fee revenue). Furthermore, sometimes, public health care providers were under pressure to provide 'obligatory remittances'. They were forced to collect user fees and remit a part of it to the local coffers.

Socio-cultural and political constraints. Public providers and villagers believed in the concept of user fees. Providers reported that patients brought money for hospital treatment and the providers urged patients to pay user fees at the point of service even if the patient had an attestation from the village head. Payment could be delayed when the patient did not have sufficient cash. Most providers were paid because they allowed delayed payment to patients with whom they were familiar. In terms of the households' perceptions, the villagers perceived that patients were responsible for paying user fees at point of service by using whatever coping mechanisms they could. The public health care providers in SVK Province and the villagers understood that the exemptions were for 'the destitute', not for them who were 'the poor'. The villagers did not expect free care from the providers and the providers felt reluctant to provide free care to the poor. The policy makers were not aware of the sensitivity between 'the poor' and 'the destitute'. The official policy on exemptions to the poor existed on paper and was endorsed by the government but political support for the implementation of the exemption policy was questionable. Political support is essential for the successful implementation of national policies. Political stability in Lao PDR is not a problem because there is only one party. The Party and the government are naturally connected to each other. Theoretically, the political party formulates policies and the government finds the best ways of implementing them. When problems occur, the government responds to the Party's criticism and the people's criticism. Why the issue of health care costs for the poor had not become identified as a problem could not be

answered by this research. The complex interrelation of political support, accountability of the government and criticism of the Party's and government's performance by people regarding the exemption policy would require further investigation.

The Lao experience reflects findings from some other countries emerging from communism. For example as found in the literature reviewed earlier, user fee policy in Vietnam was harmful to the poor and the exemptions to protect the very poor from treatment fees worked poorly in practice (Sepehri et al. 2003; Segall et al. 2002; Ensor and San 1996). Catastrophic health expenditure and impoverishment were found in Vietnam (Wagstaff and Doorslaer 2002). It should be noted that Vietnam and Lao PDR had some similarities. For example both countries had communist ideology, had transitional economies in the same period (1986-1990), and currently are in a liberalizing climate policy.

9.4.3 Improving financial protection for the poor and the less-poor

Generally, the cost at the public provider did not matter if (1) the patient was willing and able to pay for the cost of treatment or (2) the patient did not shoulder the full cost from their own pocket. Unfortunately, neither of these scenarios applied for the majority in the current situation in Lao PDR. The villagers did not have the ability to pay at all as they still lived in difficult circumstances and were very poor (an average consumption at 0.80 USD per person per day) which made the expensive services at public health providers well beyond their reach. The villagers also had to shoulder the full cost from their pocket as no health financial protection system was provided for them – even the exemption for the poor did not work well. Ideally, the system could work in two ways – (1) by increasing the ability of the villagers to pay, e.g. reducing poverty or generating more income to the households and (2) by improving protection for the patient from paying user fees at public health providers. This idea is supported by Anderson and Newman (1973) who argue that among the three main determinants of health service use, enabling factors are the most mutable. This is important in developing policy to promote equitable access to health services. It can be argued that the option (1) would be more difficult than the option (2). Poverty reduction would involve multi-sector development and be a long term process. When poverty reduction results in more income in the poor household to increase their necessary consumption,

it is still uncertain whether they would be willing to pay for health care. Households usually give high priority to food, shelter, clothes and tools for production, especially when they are ultra-poor. Investment in schooling for children and saving for health care might not be their top priority. In addition, increasing willingness to pay for health care depends not only on the availability of money but also on other factors such as quality of care. Moreover, this study did not suggest poverty reduction as the first priority of the policy options because this is already within the responsibility of the Poverty Reduction Fund and it is hoped that this fund will achieve its objectives.

The latter option, improving protection for the poor, is necessary in the health care delivery system where financial barriers inhibit access to public health services. This is the prime concern of the study. The findings from the study were analysed in line with the current context in Lao PDR. The study left some options of protecting the poor such as direct targeting (by maintaining Decree 52 with an improved implementation process), equity funds and cash transfers out of the suggestions. One of the main reasons for this was because of the existing framework of health insurance schemes stipulated in the Curative Law 2005 and options were sought which were consistent with this framework. The study then suggested a financing model for protecting the poor and the less-poor applying the current CBHI with some modification. The characteristics of the two schemes for protecting the poor and the less-poor mainly came close to the common characteristics of community-financing defined by Jakab and Krishnan (2004), except for the characteristic of mandatory membership for the poor and the non-poor (table 9.2).

Table 9.2 Characteristics of the two schemes for the poor and the less-poor compared to a common concept of community-financing

Characteristics of community-financing *	Characteristics of the two schemes for the poor and the less-poor **
• The community (geographic, religious, professional, ethnic) is actively engaged in mobilizing, pooling, and allocating resources for health care.	• The two schemes have been designed to urge community participation. Villagers would be actively involved not only in mobilizing, pooling and allocating resources but also in classifying members who would be in the poor scheme and the less-poor scheme.
• The beneficiaries of the scheme have predominantly low income, earning a subsistence from the informal sector (rural and urban), or are socially excluded.	• The poor and the less-poor schemes would cover villagers who were not entitled to GES and SHI.
• The schemes are based on voluntary engagement of the community (although not necessarily of the individual community members).	• The poor would be automatically entitled to the scheme for the poor. The scheme for the less-poor would be a mandatory scheme in order to provide financial protection for the entire people.
• The structure of resource mobilization and benefits reflect principles of solidarity.	• The two schemes would be financed by tax and household pre-payment premium. The resources could reflect the principles of solidarity within the village, the sub-district, the district and the province.
• The primary purpose of the scheme is not commercial (that is, not-for-profit).	• The MOH would be in charge for administration, management, monitoring and evaluating.

Note: * quoted from Jakab and Krishnan (2004)
** The financing model proposed in this study

The two schemes for the poor and the less-poor can be discussed according to three criteria of the health financing sub-functions: revenue collection, pooling and purchasing, as proposed by Carrin et al (2005). For revenue collection, as enrolment of the two schemes for the poor and the less-poor was designed on a mandatory basis, membership would cover everyone in the village. It effectively provides an opportunity for financial protection of the vulnerable groups. The poorest would be included in the scheme, unlike the CBHI of other countries which usually do not recruit the poorest and socially excluded (Jakab and Krishnan 2004). The scheme for the less-poor was designed to be financed by households' prepayment premium. Nevertheless, Carrin et al. (2005) suggested that within the context of CBHI, apart from household contributions, other contributions coming from central and/or local government, national or international NGOs and bilateral donors could be sources of finance. For pooling, a combination of the two schemes together offers the best risk pooling

because every villager would be automatically entitled to either one scheme or the other. This design definitely could avoid the problem of adverse selection, the main obstacle in a voluntary CBHI scheme. It could allow redistribution of the financial risk from high risk to low risk members and from wealthier to poorer members which would adequately offer financial protection for the needy. For purchasing, a contractual model with capitation was suggested to pay providers. The benefit package included OP services and hospital admissions. It was hoped that catastrophic expenditure could be avoided and the risk of impoverishment could be reduced.

Importantly, not only financial barriers but also other important determinants of access and use of health services must be improved. As shown earlier, the financing model suited areas where local public providers and communities were ready to respond to health services but was not appropriate in remote areas where villagers had difficulty in reaching public health care providers. Hence, the financing model for the poor and the less-poor would be practical when the health delivery systems are fairly well functioning to provide comprehensive services (e.g. curative care, health education, health promotion and disease prevention) to communities and communities have good enough health education and attitudes to respond to the health system. At the least, there must be a sufficient number of health facilities with proper distribution between rural and urban areas and adequate supplies of medicines in hospitals and competent staff to provide services.

The financing model of schemes for the poor and less-poor was proposed on the basis of in-depth studies in a few villages in one province, plus data collection from some public providers as well as extensive policy maker interviews and review of documentation. It is therefore necessary to have further exploration and assessment of acceptability and feasibility in a larger sample size of public health care providers and households, in order to be more confident about the suggested model.

CHAPTER 10
CONCLUSIONS

This is the final chapter of the thesis. It presents what the study has accomplished according to the objectives of the study. The study aimed to contribute to health financing policy on how to improve protection of the poor from health expenditure. The study's objectives were to (1) assess the socio-economic circumstances of villages and distinguish poverty differences between households, (2) assess health service utilization patterns and household illness costs, (3) assess illness cost burden to households including identifying catastrophic health expenditure of households and assess the strategies households use to cope with costs of illness with an emphasis on taking up the exemption mechanism, (4) assess public health care providers' behaviour and attitudes on exemption mechanisms, (5) assess the perceptions and preferences of national policy makers on fee exemption policy and implementation, and (6) analyse the financial implications of alternative protection mechanisms, and identify implications for pro-poor financing and suggest a financially viable financing model to improve ways of protecting the poor.

The first section of the chapter presents conclusions on the main findings relating to the study objectives. The second section provides policy recommendations for the overall findings learnt in the study. The third section describes the contributions of the study to knowledge in the health care financing arena. The last section highlights areas for further research.

10.1 Conclusions of findings

The four sampled villages had difficult living conditions - a consumption level of less than 1 USD per person per day, facing hunger, poor infrastructure, inadequate water, unsafe potable water, inconvenient transportation, poor hygiene and sanitation and poor access to public services. Their conditions were typical of rural areas without road of the Lao PDR. Between the villages, geography was the main determinant influencing the villagers' activity. The closer to the main road and market a village was, the more advantage it had in terms of solving a problem e.g. earning income, combating hunger, and accessing health facilities when ill. Within the village, the poorer

households were more vulnerable to food insecurity, precarious shelter, fewer livestock and resources and need for hospital admission.

Many of the villagers could not access health services when ill and some faced the negative outcome of death or disability. Predisposing components, enabling resources and illness level influenced the villagers' treatment seeking behaviour. The local facilities were the first choice whereas the public health providers were the last resort for the villagers due to many determinants e.g. physical access, financial barriers and perception of symptoms. Health services at public providers were the most expensive compared to those at local providers. User fees either small or large could cause household catastrophic health expenditure in all wealth groups, but were concentrated in the remote area and the worst-off and the middle group. Ethnic practices (e.g. using *Heet*) appeared to be one determinant for pushing households to catastrophic health expenditure. Some households could deal with the crisis themselves using a variety of coping strategies. However, the household who did not have coping strategies could be impoverished as a result of illness. The villagers did not expect any help from the government, including exemptions at public health providers. They did, however, hope to be allowed delayed payment when their cash was insufficient.

Since 1995, the government has had the intention to protect the poor by officially endorsing and implementing the national policy on user fees and exemptions at public providers. The policy makers and providers were not aware of the actual objectives of the policy. The exemption policy has suffered from many implementation problems; informational, administrative, resource, socio-cultural and political constraints. The MOH did not have information about the poor due to lack of clear criteria to identify the poor. As a result, there was no financial support to the providers who granted the exemptions. The three key stakeholders had different perceptions and interpretation of details of the user fee and exemption policy. These resulted in a wide range of practices on fee schedule, retention of fee revenues, restriction of exemption provision, and reporting system. Providers received little support from the government budget and they mainly operated by using the fee revenues.

The overall conditions were less beneficial to the poor and could even be harmful to the poor by discouraging them from using public health services. The study suggested a financing model to improve health financial protection to the poor and the less-poor. The government budget was financially capable of subsidizing the scheme for the poor. The mandatory contributory scheme for the less-poor was acceptable and financially feasible in the two sample villages. In theory, the suggested two schemes could achieve the objectives of the health financing sub-functions; revenue collection, risk pooling and purchasing health services, and they would adequately protect the poor and the less-poor from financial risk. In order to successfully implement the new two schemes, prerequisite conditions of the health delivery system must be fulfilled before implementation and four groups of constraints found from the exemption policy implementation must be overcome.

From the findings, it could be concluded that the villagers did not get much benefit from public investment for their routine lives e.g., transport infrastructure, public wells, hygiene and sanitation. When the villagers had a crisis such as facing hunger or getting sick, they managed the crisis by themselves with little support from the government. The worst-off (in terms of wealth and setting) were more vulnerable to crisis. Public health investment did not function effectively in areas such as maternal and child health services and public health training of VHV and TBA. Non-public health providers (e.g. traditional healers, private practitioners, private clinic, and private drug store) were significant for villagers because they were easily accessible and cheaper than public providers. Health services at public health providers were expensive but effective. Physical accessibility and user fees were barriers for villagers to using public health services. The government did not ensure proper and equal access to public health services when needed. The user fee policy was successfully implemented for raising revenue and, to some extent, could improve the quality of health services e.g. through replenishing drug supplies. However, the user fee policy did not accomplish its other two potential goals: to improve the efficiency of the health system and to promote equity of access to health services. The exemption policy has been ineffectively implemented which has resulted in no actual mechanism to protect the poor from paying user fees at public health providers. The government was not able to protect people, especially the poor, from catastrophic expenditure and impoverishment due to illness cost. The situation urgently called for a major reform. The exploration of

the financing model to improve health financial risk protection for the poor and the less-poor suggested this financing model was theoretically possible when prerequisite conditions of the health system were in place and the system was ready to serve the goal of health financial risk protection. However, this is a huge challenge for the government.

10.2 Policy recommendations

Although the study focused on a system to protect the poor from health financial risk, the findings clearly indicate that policy recommendations could go beyond that. Efforts to protect the poor and the less-poor are essential and a multi-sectoral approach to improve household living conditions is vital. This section will propose recommendations in the light of the conclusions specific to living conditions in the first sub-section. Policy recommendations related to health can be drawn for two main issues; (1) the health delivery system in order to ensure access by the household to health services when needed and (2) health financial risk protection for the poor and the less-poor. These two issues will be separately recommended in the second and third sub-sections.

Living conditions

Villagers need focused attention from the government in order to provide an acceptable standard of living conditions in rural areas, especially the remote areas. The most urgent focus should be on food security or better opportunity for agriculture, followed by other elements e.g. safe potable water, adequate water supply, hygiene, sanitation, and transportation. It would be helpful if the government were to provide a social safety net for the households by strengthening the social network within the community, for example to intensify inter-household support for combating lack of rice and hunger or to make support more systematic. Hygiene and sanitation could be improved through routine activities e.g. eating and drinking habits by promoting health education. It is hoped that these deficiencies in rural area of Lao PDR will be remedied by the NGPES.

Health care delivery

The study recommends urgent action from the MOH to ensure access to health care services when it is needed by households in order to prevent negative health outcomes of death or disability, especially for curable disease. Health care delivery systems are fundamental for improving health financial risk protection for the poor and the less-poor. The MOH should promote equity in access to public health providers among households belonging to different wealth groups and among villages with different geography. Basic health interventions like maternal and child services should be enthusiastically implemented by public health providers at all levels and intensively monitored by the MOH. Use of health services at the nearest health centre should be promoted because it is the cheapest (both service cost and transportation cost) among public providers.

Further suggestions for health delivery relate to local and private providers – to reinforce the VHV and RDF and to formalize and strengthen existing traditional healer and private practitioners which were usually the first source of care. Available VHVs need to be trained and regularly supervised by senior health personnel in order to improve their capacity and to encourage them to play a major role in health development e.g. disease prevention and health promotion and health education in the community, rather than concentrate only on the distribution of medicines. An appropriate workload for each VHV should be taken into account. A VHV should not be a village head or village committee member who already has many tasks in hand. It is not necessary to invest in RDFs at village level where the village is located near a market and the villagers can easily access private drug stores. The private practitioners and healers in the village can be registered in the official health delivery system. They could be trained, supervised and evaluated by the staff of the health centre or district health office in order to ensure the quality of care that patients would get from them.

In addition, policy attention should be given to the specific needs of the ethnic groups living in remote areas. Relevant actions might include: improving quality in remote facilities or strengthening traditional healers or licensing private practitioners to provide mobile care in remote areas. Action could be taken to promote health education on villagers' knowledge, attitude and practice about choosing services in order to avoid catastrophic expenditure from ethnic minority group practices such as *Heet*.

Improving health financial risk protection to the poor and the less-poor

The suggested financing model on the two schemes for protecting the poor and the less-poor from health financial risk would lead to a dramatic reform in the health financing system in Lao PDR. It would transform the financing system which is based on income from households' out-of-pocket expenditure into a system based on prepayment and tax-funding. A small amount of co-payment for user fees at point of service is recommended. This would preserve the providers' and the households' belief in the necessity of paying user fees. These are from the analysis of the study which took into account contextual factors or local conditions. It is recommended that this financing model must be further investigated in terms of the feasibility of the model from both demand and supply sides. If it appears feasible at national level, it needs also to be scrutinized in terms of the interests of concerned partners and the reactions of these partners to policy content, as suggested by Walt (1994).

Implementation of the new two schemes would definitely require tremendous effort to overcome foreseen and unforeseen difficulties. The recommendations to deal with problems learnt from the implementation of Decree 52 PM can be drawn (table 10.1). Main recommendations are (1) clear policy statement with policy vision and goals, (2) official endorsement and political commitment, (3) strong leadership of the MOH to effectively implement the policy and (4) sufficient and sustainable financial compensation on health care costs to providers.

The financing model for protecting the poor and less-poor from financial risk assumed no new investment in infrastructure and human resources. The model, then, could be applicable in some areas but not in other areas. In fact, the Lao health delivery system requires progressive development in order to ensure proper access to health services for the unwell. It is recommended that before the further development of mechanisms for financial protection, the MOH should seriously improve infrastructure and human resources in terms of adequacy and equitable distribution throughout the country. An accreditation system for health services is advocated in order to guarantee the standard of care offered by the providers which will encourage villagers to access and use public health services.

Table 10.1 Policy recommendations based on lessons learnt from the implementation of Decree 52 PM

Four groups of problems limited the success of exemption policy implementation *	Recommendations on the implementation of the two schemes to protect the poor and the less-poor **
• Informational constraints	• Clear policy statements, objectives and contents • Identify the poor using wealth ranking by villager committee members • Production of practical guidelines
• Administrative constraints	• Strong leadership of the government (the MOH) to implement the new two schemes with competent capacity to translate policy into implementation • Clear communication between policy makers and providers through effective approaches e.g. meetings, supervision visits, etc • Public information campaign e.g. meetings with village leaders • Establish strong supervision of the MOH to local level • Establish effective monitoring system
• Resource constraints	• Sufficient and sustainable resources to compensate providers on health costs • Support to using the existing local funds at local level (through decentralization)
• Socio-cultural and political constraints	• Create awareness of the same understanding among stakeholders • Official endorsement of the policy • Strong political commitment on implementation

Note: * Based on Gilson et al. (1995)
** Recommended by the researcher

10.3 Contribution to knowledge

In the international literature, studies relating to the implementation of user fees and exemptions policy have mainly been conducted in African countries (Russell and Gilson 1997; WHO 2003; Creese and Kutzin 1995). A few multi-country studies have reviewed Asian countries e.g. Cambodia, Indonesia and Thailand (Bitran and Giedion 2003) and a few have examined individual countries e.g. Thailand (Mills 1991; Gilson et al. 1998) and Vietnam (Sepehri et al. 2003; Segall et al. 2002; Ensor and San 1996). Only one study was carried out in Lao PDR (Paphassarang et al. 2002). Most studies have explored policy content and examined the effectiveness of the policy at the providers and/or the community level.

Studies have rarely conducted comprehensive research on exemption policy including information from policy makers, public health care providers and households ranging from the national to the community level. Two comprehensive studies have been carried out. One was conducted in Thailand, 'Exempting the Poor: A Review and Evaluation of the Low Income Card Scheme in Thailand', by Gilson et al. (1998). Another is this thesis.

In addition to the research on the exemption policy, this thesis has contributed knowledge on health seeking experiences, cost burden including catastrophic expenditure in rural Lao PDR and the strategies used to cope with illness-related costs, which have not previously been reported in the international literature. The thesis identified catastrophic health expenditure of households in Lao PDR, which is the first ever investigation in Lao PDR.

The study demonstrates that wealth ranking by FGDs is feasible with cautious use. Wealth ranking can be used as a tool for identifying the worst-off households which comprise about 28% of the total households in villages in the rural areas of Lao. The study shows that wealth ranking results are fairly reliable for the top and the bottom households but its application must be prudent. The results from the Principal Component Analysis (PCA) show that the mean score of the asset index obtained by the village census using household assets reasonably correlated with the results of the wealth ranking by FGDs. In every village, the better-off had the highest asset index

score, the middle had a lower score and the worst-off had the lowest score. It was found that wealth ranking can differentiate the better-off from the worst-off but it cannot distinguish well the middle group. Wealth ranking could be considered as a tool for identifying the poor in a setting where there is a lack of information to identify the poor. If it is used, its results must be carefully checked. It will be especially useful in developing countries where the majority of people reside in rural areas and work outside the formal market economy so that data on earnings are often not obtainable. In addition to identifying the poor, wealth ranking by FGDs could be used to examine equity in the health system. Other studies found in the international literature mostly measured health equity using quantitative data on household income or expenditure as mentioned earlier.

Household income, expenditure and consumption are the most important parameters for measuring household catastrophic health expenditure. Ideally, they should be obtained from every sampled household but, generally, this is costly and time-consuming. Based on Health Economic Approaches (Seaman et al. 2000), this study constructed a framework for quantifying household consumption using wealth ranking by FGDs and a consumption survey in some sample households in each wealth group. This framework was practical and achieved the aim of quantifying an average household consumption per person per day for each wealth group. After that, it was possible to estimate the consumption of every household based on the number of members of each household. As a result, the study suggests the framework as an optional approach for quantifying household income, expenditure or consumption, especially where there are time constraints or budget limitations.

The study revealed limitations of research on health care expenditure if only quantitative methods were used. The level of catastrophic health expenditure did not always echo the severity of household financial hardship from health costs. The actual consequences of catastrophic illness cost for household livelihood depend on the capacity of the household to absorb health costs e.g. level of household income, capacity to mobilise additional resources. Some households could cope well and did not suffer from a 'catastrophic' level of costs whereas some households were impoverished. In contrast, a zero value of health care cost (by not seeking care) did not always reflect a satisfactory consequence to the household. Some households

could easily recover from illness whereas for others the result was the catastrophic health outcome of disability or death. The situation was especially sad if the disease was curable. The study emphasized the value of a combination of quantitative methods for indicating the presence of the problem of catastrophic health expenditure and qualitative methods (e.g. household in-depth interview) to gain more insights about its consequences for household livelihood. Research on catastrophic health expenditure needs to be supplemented by a concern for catastrophic health outcomes, especially in least developed countries where problems of access to health care mean that need for health care is not necessarily translated into expenditure.

The study also contributes data on the importance of compensation on health care costs to providers who granted exemptions. Inadequate or no financial support to providers makes the exemption policy far from a reality. The study showed a significant issue on the delicate definition of who is eligible for exemption which has never been reported in international literature. The definition of the poor and the destitute was one of the main factors undermining the success of the exemption policy.

10.4 Further research in Lao PDR

This study has achieved the objective of addressing households' experience of health seeking, health care costs and coping strategies. However, the findings are from only four villages in a rural area. It could be expanded to cover a larger sample size of households and to urban settings which may have different result from a rural setting. Factors influencing the success of the exemption policy have been identified. A financing model for financial protection has been suggested based on the analysis of findings of the study and the current context and assessment of financial viability. Further research on providers and policy makers could aim to have a better understanding of (1) government capacity to implement policy, (2) the process of policy formulation and implementation that favour the poor under a socialist ideology and (3) health financing under the decentralized system e.g. financing role of central government, local governor and public health providers. Research into the reactions of all concerned partners to the recommended policy options would serve to corroborate or refute the options and would complete the process of policy development.

The study has also indicated gaps in knowledge regarding health care financing. It found that many households, especially in rural areas, commonly adopted cost prevention by not seeking care when ill. This led to 'catastrophic health outcomes' of disability or death which then led to the impoverishment of some households and was considered as serious as catastrophic health expenditure. The study was not designed to quantify how serious or how large this problem is. Research to quantify the magnitude of the problem and demonstrate the consequences of inaccessibility to health services is needed in order to shape a policy of improving infrastructure and health personnel of both the public and private sectors, including local health facilities. Further research should pay greater attention not only to catastrophic economic outcomes due to health care cost but also to the catastrophic health outcomes of death or disability due to the inaccessibility of health services.

The study found that the traditional ceremony of *Heet* is a special event in the household which is extremely costly. The ceremony was adopted only by the *Lao Theung* ethnic group, not the *Lao Lum* and it led to catastrophic health expenditure in two households out of a total of three households. The findings suggest that health

financial risk might be influenced by ethnic group. Further research in Lao PDR should assess the significance of ethnic minority groups, *Lao Sung* (10%) and *Lao Theung* (24% of total population), in terms of differences in health seeking patterns, health care costs and health outcomes. It also calls for the attention of international research on catastrophic health expenditure in relation to ethnic minorities.

This study used a village census (cross sectional survey) and one-off household in-depth interview to present the impact of health care costs on the household economy. It presented the strategies used by the household to mobilize resources for health care. It was not able to track the long term consequences of health care costs on the household. For example in the case of borrowing, it was not known how long the household had to repay debt, if the household suffered damaging cuts in consumption or if the household livelihood changed. Further research using longitudinal qualitative methods is suggested in order to gain insight into how illness and its costs affect household livelihood over time. Longitudinal household research can explain the processes of links between illness cost, impoverishment and livelihood change (Russell and Gilson 2006). It will improve understanding on the demand-side which will be useful for policy options on improving health financial risk protection and health system performance.

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APPENDIX I

Tools of the study

A) Questionnaire for a village census 315
B) Questionnaire for illness in the previous two weeks 324
C) Questionnaire for person admitted in the previous twelve months 328
D) Questionnaire for household consumption 332
E) Village information: key informants interview 334
F) Wealth ranking using focus group discussion 341
G) Households' perception on user fees and exemptions 344
H) Guideline for public health provider interview 355
I) Guideline for policy maker interview 358

Questionnaire For Cross-sectional Household Interview

Interview date:.....Village.....

Ethnic group of hh head.....Religion of hh head.....

A: FAMILY STRUCTURE (Individuals age 15+, mother/guardians answer for individuals <15 and 60+)

ID	Name	Relationship to hh head 1. Head 2. Spouse 3. Own child 4. Step child 5. Adopted child 6. Parent 7. Brother/sister 8. Grand child 9. Aunt/uncle 10. Parent in-law 11. Daughter/son in-law 12. Sister/brother in-law 13. Other relatives 14. Non-relative, servants	Sex 1. M 2. F	Age (recorded in completed years, if age less than 1 year, record "00", 99 = DK, do not know)	Date of birth	Place of birth 1. Farm 2. House 3. HC 4. DH 5. PH 6. Other specify... 9. DK	Birth assistant 1. Husband 2. Relative 3. TBA 4. H worker 5. No assist 6. Other specify..... 9. DK	Marital status 1. Single 2. Married 3. Widowed 4. Divorced 5. Separated 6. Ever-married but unknown status	Literacy Read & write 1. Easily 2. Difficult 3. Not at all 9. DK (member 6+)		Highest level of education completed 0. No 1. Primary 2. Secondary 3. Higher 4. Non-formal curriculum 5. Studying 9. DK
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11
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15											

ID	Occupation or main duties									Disability			Have ever get services (OP/IP)		
	In the past 12 months, what are your main occupations or main duties? 1. Growing rice 2. Growing vegetable 3. Fishing 4. Rear livestock 5. Sawing 6. Student 7. House duties: manual husk rice, carrying water 8. Other house duties..... 9. Other specify..... mark [/] in item they usually do									Is there any disabled person in the household? [ ] Yes [ ] No mark [/] to indicate who is disabled	Type of disability 1. Visual disability or blindness 2. Deaf or hard of hearing 3. Mute 4. Deaf and mute 5. Body disability (arm, leg) 6. Multiple disability 7. Other....	Cause of disability 1. Since birth 2. War 3. Accident 4. Drug 5. illness 6. Other.....	PH 1 Y 2 N	DH 1 Y 2 N	Specify DH
	A12	A13	A14	A15	A16	A17	A18	A19	A20	A21	A22	A23	A24	A25	A26
	1	2	3	4	5	6	7	8	9						
01															
02															
03															
04															
05															
06															
07															
08															
09															
10															
11															
12															
13															
14															
15															

Ask part H: IMMUNIZATION MODULE (children under 5 years old)

before going to part B: BIRTH

B: BIRTH (Individuals women 15-49)

ID	Have you ever gotten pregnant? 1. Yes 2. No 9. DK	Have you had any abortion in the course of your life? 1.Yes 2. N0 9. DK	How many abortions have you had?	For the last pregnancy where did you get ANC? 0. Never 1. TBA 2. HC 3. DH 4. PH 5. Other...	For the last pregnancy, how many TT doses did you get? Specify number of TT doses 0. No 1 2 3 9. DK	How many **total live births** have you had in your life?	How many live births are currently living in the same house?	How many live births are currently living in other house?	How many deaths?	Age of your first pregnancy
	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
01										
02										
03										
04										
05										
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										

C: DEATH (Individuals women age 15-49 who have died children)

No. of death cross check with total death	Name	Sex 1. M 2. F	Age at death	How many years ago did s/he die?	Place of death 1. Farm 2. Home 2. HC 3. DH 4. PH 5. On the way 6. Other...	Cause of death 1. homicide 2. Commit suicide 3. Traffic accident 4. Drown 5. Other accident 6. Die during pregnancy, labor or 42 days after birth 7. Illness 8. Other..... 9. DK	Before death, did s/he obtain any health services? 1. Yes 2. No 9. DK	Which type of health care providers did s/he obtain before death? 1. Friend 2. *Seang- Pao* 3. *Yao* 4. Herb 5. Health practitioner 6. VHV 7. Drug store 8. Private clinic 9. HC 10. DH 11. PH 12. CH 13. Private hospital 14. Other... Mark / for which item used														
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20	C21
								1	2	3	4	5	6	7	8	9	10	11	12	13	14
01																					
02																					
03																					
04																					
05																					
06																					
07																					
08																					
09																					

D: INSURANCE, ILLNESS AND UTILISATION (Individuals age 15+, mother/guardians answer for individuals <15 and 60+)

	Insurance	OP in the past 2 weeks			IP in the last 12 mo.		Exemptions and debt (in general)		
ID	Insurance scheme 0. No 1. GES 2. SSS 3. CBHI 4. Other....	In the past 2 weeks did you get ill or not feeling well? 1.Yes 2.No	How many times were you ill in the past 2 weeks	How many days were you not able to go to work or school because of **the last episode** of illness?	In the past 12 months, have you stayed at health providers e.g. HC, DH, PH, private hospital? 1.Yes 2.No	How many times had you stayed in the hospitals?	Do you know about exemption? 1. Yes 2. No Individual age 15+	Have you ever had experience on exemptions at public health providers? 1.Yes 2.No Individual age 15+	Have you ever been put into debt list of the health care providers? 1.Yes 2. No Individual age 15+
	D1	D2	D3	D4	D5	D6	D7	D8	D9
01									
02									
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									

Note: This page is filter or screening questions. If yes for OP or IP, a separated questionnaire will be used. If yes for exemptions, this will be a household in-depth interview.

E: DWELLING-RELATED INDICATORS (Head of household and his or her spouse)

1. Ownership status

[ ] 1. Owner
[ ] 2. Rent
[ ] 3. Co-habitat without rent
[ ] 4. Government or employer's house (no rent paid)
[ ] 5. Other specify.....

2. Major construction material:

	Roof	Walls	Floor
Tile			--
Zinc sheet			
Wood (*Paen*)			
Concrete			
Bamboo (*Mai Pak*)			
Dry leaf (*Bai Tong*)			
Dry grass (*Yaa*)			
Others specify.....			

3. What is the observed structural condition of the main dwelling?

[ ] 1. seriously dilapidated [ ] 2. Needs major repairs [ ] 3. Sound structure

4. What is the electricity supply?

[ ] 1. No [ ] 2. Yes, shared connection [ ] 3. Yes, own connection

5. What is the main source of lighting in your dwelling?

[ ] 1. Electricity
[ ] 2. Kerosene, oil or gas lamps
[ ] 3. Candles
[ ] 4. Battery flashlights
[ ] 5. No lights

6. What type of cooking-fuel source primarily is used?

[ ] 1. Dung
[ ] 2. Collected wood
[ ] 3. Purchased wood
[ ] 4. Charcoal
[ ] 5. Gas
[ ] 6. Electricity

7. What is the main source of water for general used, drinking and cooking?

	General used	Drinking	Cooking
Pipeline			
Ground water			
Well water			
Pond/River			
Rainwater			
Other specify.....			
To describe containers and take photo			

8. How do you treat your drinking water? (multiple choice of 1-3)

[ ] 1. Nothing
[ ] 2. Boil
[ ] 3. Filter
[ ] 4. Add chemical/disinfectant/setting agent

9. What type of toilet facility is available?

[ ] 1. Bush, field, or no facility
[ ] 2. Pit toilet
[ ] 3. Flush toilet
[ ] 4. Other.....

F: Food security

1. For the previous harvest season, for how many months did your household have enough rice of your own for consumption?

   Answer.....months

2. In case that your household had not enough rice of your own for the whole year consumption, how do you deal with the problem?

   Answer

   .....

   .....

   .....

   .....

   .....

   .....

   .....

3. Refer to above question; did you successfully deal with the lack of rice of your own? (adequate rice to consume)

   [ ] Yes [ ] No

4. For the previous harvest season, for how many months did your household have at least one day in the month without enough to eat?

   Answer .....months

5. In case that your household faced hunger, how do you deal with the problem?

   Answer

   .....

   .....

   .....

   .....

6. For this harvest season

	Paddy sticky rice
4.1 Has in the stock (how much, unit)	
4.2 Is it enough for the whole year consumption of your household? (1. Yes 2. No)	
4.3 If no from previous Q, how long can your household consume this amount? (from mo.....to mo.....)	
4.4 Is it enough for sale or lending to someone? (1. Yes 2. No)	
4.5 If yes from previous Q, apart from household consumption, how much the total sale value or lending value will be? (unit of rice and price per unit)	

G: Assets Number of selected assets owned by household

Asset type	Number owned	Resale value at current market price
Livestock		
1. Buffalo		
2. Cow		
3. Pig		
4. Goat		
5. Turkey		
6. Duck		
7. Chicken		
Transportation assets		
1. Cars		
2. Tak-Tak		
3. Motorcycles		
4. Bicycles		
5. Motor-boat		
Appliances		
1. Pan		
2. Pots for cooking		
3. Spade of frying pan		
4. Long-handle ladle		
5. Knife		
6. Tray for serving meal		
7. Bowl		
8. Spoon		
9. Mattress		
10. Blanket		
11. Television		
12. Video CD		
13. Refrigerator		
14. Electric cooker		
15. Gas cooker		
16. Electric kettle		
17. Washing machines		
18. Radio		
19. Fan		
20. Air condition		
21. Telephone		
22. Mobile phone		

H. Immunization (Children under 5 years old)

HH ID.....Name of HH head.....

Child ID.....Child name.....

Record from an immunization card

	Yes 1 No 2 DK 9	Day/month/year __/__/____
1. Is there a vaccination record card for this child?		
2. BCG		
3. Check BCG scar		
4. DPT1+Hep B		
5. DPT2+Hep B		
6. DPT3+Hep B		
7. OPV1		
8. OPV2		
9. OPV3		
10. Measles or MMR		

Mother's report when an immunization card is not available

	Yes 1 No 2 DK 9	Number:
1. Has this child ever been given a **BCG** vaccination against tuberculosis—that is, an injection in the left shoulder that caused a scar?		--
2. Check BCG scar		--
3. Has this child ever been given **"vaccination injections"**—that is, an injection in the thigh or buttocks—to prevent him/her from getting tetanus, whooping cough, diphtheria, Hepatitis B? How many times?		
4. Has this child ever been given **"vaccination drops"**—to prevent him/her from getting POLIO? How many times has s/he been given these drops?		
5. Has this child ever been given **"vaccination injections"**—that is, a shot in the arm, at the age of 9 months or older—to prevent him/her from getting MEASLES (ไข้หมากแดง)?		

ILLNESS IN THE PREVIOUS TWO WEEKS: UTILIZATION, TRANSPORTATION AND EXPENDITURE OF THE LAST EPISODE

Village.....Name of hh head.....ID of hh member.....

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Do nothing	Neighbours	Seang & Pao	Moh Yao	Herb	Health practitioner	VHV	Drug store	Private clinic	HC	DH	PH	CH	Private hospital	Other
Mark [/] if yes															
Sequencing															
Name.....															
Mode of transportation															
Travel time from home (hours for one way)															
1. Total Cash expenses (kip: 1.1-1.7)															
1.1 Transportation expenses															
1.2 User charges															
1.3 Payment for gratitude															
1.4 Buying drug outside															
1.5 Informal payments															
1.6 Expense for care giver															
1.7 Other expenses e.g. liquor															
2. Total in-kind expense (what, kip = 2.1-2.5)															
2.1 Sacrificed livestock for healer.....															
2.2 Sacrificed livestock for healer.....															
2.3															
2.4															

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Do nothing	Neighbours	Seang & Pao	Moh Yao	Herb	Health practitioner	VHV	Drug store	Private clinic	HC	DH	PH	CH	Private hospital	Other
2.5															
3. Grand total expenses (3=2+1)															
Did you have enough cash from your own pocket at that time to pay total cost? 1.Yes 2. No															
Did you know about exemption? 1.Yes 2.No															
Did you ask for exemptions? 1.Yes 2.No															
Did you get exemptions? Specify..... 0.no															
Why don't you ask exemption? Multiple answers, see code															
Had you been put into debt list? 1.Yes 2.No															
How many times in debt list? Specify.....															
How much debt in total? Specify.....															
Could you repay the debt? 1.Yes 2.No															
How did you repay debt? 1.Cash 2.In kind 3.Labour															
Did anyone give you something? (who, what, kip)															
Source 1															
Source 2															
Source 3															
Source 4															
Source 5															
Did you borrow cash or livestock? (source and kip)															

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Do nothing	Neighbours	Seang & Pao	Moh Yao	Herb	Health practitioner	VHV	Drug store	Private clinic	HC	DH	PH	CH	Private hospital	Other
Source 1															
Source 2															
Source 3															
Source 4															
Source 5															
Did you sell livestock? (what, kip)															
Livestock 1															
Livestock 2															
Livestock 3															
Livestock 4															
Livestock 5															
Did you sale other assets? (what, kip)															
Asset 1															
Asset 2															
Asset 3															
Asset 4															
Asset 5															

To sum up for all health facilities

Total cash expense = ...kip

In-kind payment = ...kip

Total cash and in-kind payment = ...kip

How long does it take your household to <u>normally</u> earn this amount?.....

Mode of transportation

1. Walking	3. Motorcycle	5. Tak-Tak	7. Public car
2. Bicycle	4. Car	6. Boat	8.Other.....

Reasons for don't ask exemption

1. Do not know	4. There are worse off patients	7. Complex process, not convenient
2. Not eligible	5. Quality of care might be reduced	8. Other specify.....
3. Stigmatization	6. Staff reluctant to give free care	

ADMISSION IN THE PREVIOUS TWELVE MONTHS: UTILIZATION, TRANSPORTATION AND EXPENDITURE OF THE LAST EPISODE

Village.....Name of hh head.....ID of hh member.....

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Do nothing	Neighbours	Seang & Pao	Moh Yao	Herb	Health practitioner	VHV	Drug store	Private clinic	HC	DH	PH	CH	Private hospital	Other
Mark [/] if yes															
Sequencing															
Name.....															
How many days did you spend in the provider? (days)															
Mode of transportation															
Travel time from home (hours for one way)															
1. Total Cash expenses (kip: 1.1-1.7)															
1.1 Transportation expenses															
1.2 User charges															
1.3 Payment for gratitude															
1.4 Buying drug outside															
1.5 Informal payments															
1.6 Expense for care giver															
1.7 Other expenses e.g. liquor															
2. Total in-kind expense (what, kip = 2.1-2.5)															
2.1 Sacrificed livestock for healer.....															
2.2 Sacrificed livestock for healer.....															
2.3															

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Do nothing	Neighbours	Seang & Pao	Moh Yao	Herb	Health practitioner	VHV	Drug store	Private clinic	HC	DH	PH	CH	Private hospital	Other
2.4															
2.5															
3. Grand total expenses (3=2+1)															
Did you have enough cash from your own pocket at that time to pay total cost? 1.Yes 2. No															
Did you know about exemption? 1.Yes 2.No															
Did you ask for exemptions? 1.Yes 2.No															
Did you get exemptions? Specify..... 0.no															
Why don't you ask for exemption? Multiple answers, see code															
Had you been put into debt list? 1.Yes 2.No															
How many times in debt list? Specify.....															
How much debt in total? Specify.....															
Could you repay the debt? 1.Yes 2.No															
How did you repay debt? 1.Cash 2.In kind 3.Labour															
Did anyone give you something? (who, what, kip)															
Source 1															
Source 2															
Source 3															
Source 4															
Source 5															

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Do nothing	Neighbours	Seang & Pao	Moh Yao	Herb	Health practitioner	VHV	Drug store	Private clinic	HC	DH	PH	CH	Private hospital	Other
Did you borrow cash or livestock? (source and kip)															
Source 1															
Source 2															
Source 3															
Source 4															
Source 5															
Did you sell livestock? (what, kip)															
Livestock 1															
Livestock 2															
Livestock 3															
Livestock 4															
Livestock 5															
Did you sell other assets? (what, kip)															
Asset 1															
Asset 2															
Asset 3															
Asset 4															
Asset 5															

To sum up for all health facilities

Total cash expense = ...kip
In-kind payment = ...kip
Total cash and in-kind payment = ...kip
How long does it take your household to <u>normally</u> earn this amount?.....

Mode of transportation

1. Walking	3. Motorcycle	5. Tak-Tak	7. Public car
2. Bicycle	4. Car	6. Boat	8.Other.....

Reasons for don't ask exemption

1. Do not know	4. There are worse off patients	7. Complex process, not convenient
2. Not eligible	5. Quality of care might be reduced	8. Other specify.....
3. Stigmatization	6. Staff reluctant to give free care	

Household Consumption Questionnaire

Interview date.....

Village.....Name of hh head.....

1. Non-food expense in the last 30 days (rather frequent)

	In the past 30 days, has any member of your hh spent money on any of the following items?			How much did your hh spend?	How many months in the past 12 months did your hh purchase?
		No	Yes	Kip per month	Month
1	Tobacco, cigarettes, cigars				
2	Liquor				
3	Newspapers or magazines				
4	Lottery				
5	Fare for bus or gasoline				
6	Regular worship				
7	Battery charging				
8	Washing powder				
9	Seasoning powder				
10					

2. Non-food during the past 12 months

			Purchase	Gift	
		Has your hh bought, spent money on any [ITEM] during the past 12 months? Mark / as yes	How much did your hh spend for [ITEM] during the past 12 months?	Did you receive any [ITEM] as a gift during the past 12 months? Mark / as yes	What is the value of all the [ITEM] that you received as a gift during the past 12 months?
			Kip		Kip
1	Clothes				
2	Footwear				
3	Personal care (soap, shampoo, toothpaste, etc.)				
4	Personal service (haircuts, shaving, etc.)				
5	Medicines				
6	Book				
7	Communication				
8	Kitchen supplies				
9	Vehicle repair				
10	House repair/house rent				
11	Cooking-fuel				

3. Food expense during

			Purchase		Home production				Gift/Borrowing			
		Has your hh consumed [FOOD] during the past 12 months? Mark / as yes	How many mo in the past 12 months did your hh purchase [FOOD]?	How much do you usually spend on [FOOD] in one of the months that you purchase ?	How many months in the past 12 months did your hh consume that you grew or produced at home?	How much did you consume in a typical month?		What was the value of the [FOOD] you consumed in a typical month from your own production?	How many months in the past 12 months did your hh consume that you get as gift or borrow from others?	How much did you consume in a typical month?		What was the value of the [FOOD] you consumed in a typical month from gift or borrowing?
			Months	Kip/mo	Months	amt	unit	Kip	Months	amt	unit	Kip
1	Beef											
2	Pork											
3	Turkey											
4	Duck											
5	Chicken											
6	Egg											
7	Fish											
8	Vegetable											
9	Bamboo shoots											
10	Chilli											
11	Fruits											
12	Salt											
13	Sticky rice											
14	Milk											
15	Sugar											
16	Oil											
17	Alcoholic beverage											
18	Non-alcoholic beverage											
19	Tea/coffee											
20	Misc other food expense											
21												
22												

VILLAGE INFORMATION

By Key Informants Interview

General information of village

1. Province: Savannakhet
2. District.....
3. Sub-district.....
4. Village name .....
5. Area [ ] 1. Urban [ ] 2. Rural with road [ ] 3. Rural without road
6. Name of head of village .....

Have been in the position for ..... Years, Was re-appointed ..... [ ] yes [ ] no

7. Name and position in the village of Key Informants

8. Interview date (dd/mm/yr).....
9. Time.....
10. Number of households in the village.....
11. How many inhabitants are there in this village, using the most update household listing of the village head, if available?

Age group	Total	Male	Female
0-5			
6-15			
16-60			
60+			
Total			

12. No. of primary school age children that should be in school (total) – to estimate enrolment rate (information from the teacher/village head)

Grade	No. of teacher	No. of student	No. of children that should be in school
1			
2			
3			
4			
5			
Total			

If KI is the teacher, then ask main reasons why not in school?

13. Is there a primary school in this village?

[ ] yes

[ ] no, if no, where the nearest primary school?

Name.....

Distance from this village.....km

How many minutes by walk.....minute, by bike.....minute

The most accessible mode [ ] by walk [ ] by bike

14. Adult literacy rate;

No. of adult men who can read and write easily.....

No. of adult women who can read and write easily.....

Water, sanitation and public utilities

15. Source of water for general use (indicate type, number, status and update to the map)

16. What is the main source of drinking water for people in the village? Did people usually boil water before drinking, how drinking water was treated?

17. How many toilets are in the village? (indicate type, number, status and update to the map if it is toilet of the village)

18. Is electricity available in the village?

[ ] yes

[ ] no, if no, what are used, described (such as battery, small diesel electricity generator, solar cell)

19. How can this village be accessed?

Mode of transport	Dry season (indicate month to month)	Rainy season (indicate month to month)	How many of these transport available in the village
Tak-tak*			
Car			
Boat			
Motorcycle			
Other specify			

Note: tak-tak* refers to mini plough truck for farm (Diesel engine with additional equipment for plough and a wooden cart for transport)

20. To which of the following are village members accessible?

Radio [ ] yes [ ] no

Newspaper [ ] yes [ ] no

Television [ ] yes [ ] no

Other..... [ ] yes [ ] no

21. Is there any market in this village?

[ ] yes

[ ] no, if no, describe buying and selling method used by people in the village (example from Tang A Lai Village; no market in the village, buyer comes to the village, this implies that Tang A Lai is non-cash economy as mostly consumed their own produces.)

22. Housing materials, what are <u>most</u> of the house in the village made of? Describe the material used.

Floor:

Roofs:

Walls:

History of the village

23. Could you please tell us about history of the village? How many years has this village been settled?, relationship with other villages nearby, in term of ethnicity, kinship, issue of intra family marriage?

Health care facilities

24. How many health facilities in the village?

No.	Health facilities	number	Note (e.g. name)
1.	หมอเยา (*Moh Yao*) Spiritual healer In some cases, there is no Moh Yao in the village, but invited from other village to provide treatments)		
2.	หมอเฒ่า (*Moh Pao*) (*Moh Yao* believes in ghost while *Moh Pao* believes in his own spirit for healing patient.)		
3.	Traditional herbal medicine (*Moh Yah Puent Baan*)		
4.	Traditional Birth Attendant (TBA)		
5.	Village Health Volunteer (VHV)		
6.	Village Revolving Drug Fund		
7.	Private drug store		
8.	Private practice by doctor		
9.	Private practice by medical assistant		
10.	Private practice by nurse		
11.	Private practice by other medical staff		
12.	Health centre		

25. Are there any other health services for community?

How to reach the nearest health facilities and transportation cost

26. The nearest health facilities of this village

	The nearest health centre	The nearest district hospital	The nearest provincial hospital
Name			
Distance from village (km)			
Describe characteristics of road and photograph			
Walking			
Can people reach by foot? (yes / no)			
How long does it take time for walking? (minutes)			
Public transport			
Is there public transport? (yes / no)			
Service hour of public transport			
How often public transport provides services, e.g. every.....minutes			
Cost of public transport per person per trip (kip)			
Hired car			
Is there any car for hire (yes / no) If yes, indicate type			
How much does hired car cost per trip (kip)			
Gasoline (Litre and indicate Diesel / Benzene)			
Price of gasoline per litre			
How long hired car take time (minutes)			

27. Draw a map of village-health centre-district hospital-provincial hospital and describe condition of road

28. What are the **three most preferred** health facilities used by patients?

Village mapping

29. Draw a map of village and describe essential detail as much as possible e.g. households, water for general use (type, number, status), drinking water (type, number, status), school, health facilities (place of TBA, VHV, HC,.....), toilet of the village, market

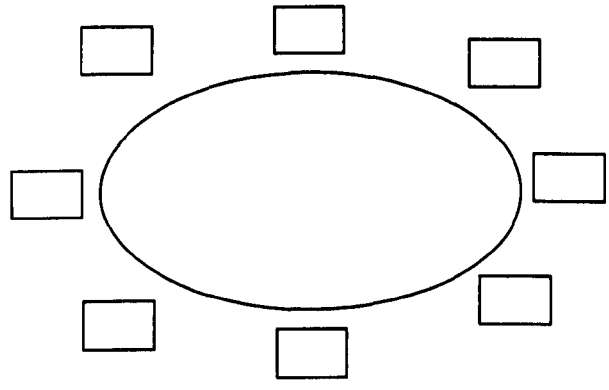
WEALTH RANKING

Name of village.....
District.....
Province.....

Date.....Time.....
FGD number.....
General information of FGD members and position in the village

No.	Name	Gender	Age	Position in the village
1.				
2.				
3.				
4.				
5.				
6.				
7.	Keolanee	F	36	Research assistant
8.	Walaiporn	F	36	Researcher

Seating position of FGD members (put number of FGD members in the box)



Preparing name cards of households' head

Identification of the poor household in this village

1. Could you classify total households in the village into three groups

Grouping	HH identification number (by listing of the village head)	Total hh	Total hh members (filled by researcher)
Better-off			
Middle			
The poor			

2. According to Q1, what are criteria to identify the poor household in your village?

Listing of criteria raised by FGD members

No.	Criteria	Raised by whom	Opinion of other members

Take note:

Consensus on the most five important criteria to identify the poor household (The researcher tries to reach consensus on criteria among FGD members)

1. (the most important)

2.

3.

4.

5. (less important)

3. Now, we have identified the poor households. Could you please rank this group from the worst household to the less worse household?

4. In the worse group today, how many of them had stayed in middle or better group in the past five years? Who? Why? Describe detail (This question will show class mobility during 2000-2005.)

5. In the middle group today, how many of them had stayed in better or worse group in the past five years? Who? Why? Describe detail (This question will show class mobility during 2000-2005.)

6. Refer to question 4, there are .....households who have stayed poor in the past five years (the repeated poor). Why do they still stay poor? (Urge them to discuss main determinants of chronic poverty)

HOUSEHOLDS' PERCEPTIONS
ON USER FEES AND EXEMPTIONS

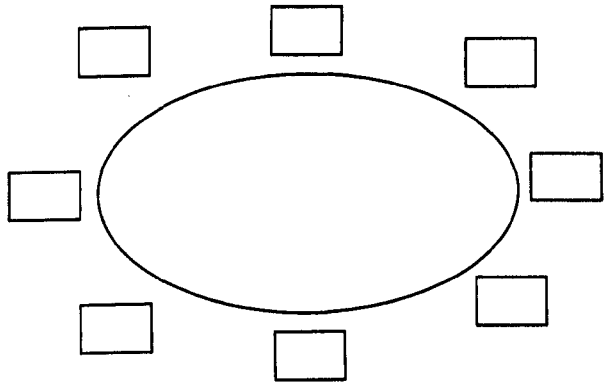
Name of village.....
District.....
Province.....

Date.....Time.....
FGD number.....

General information of FGD members and position in the village

No.	Name	Gender	Age	Position in the village
1.				
2.				
3.				
4.				
5.				
6.				
7.	Keolanee	F	36	Research assistant
8.	Walaiporn	F	36	Researcher

Seating position of FGD members (put number of FGD members in the box)



User fees

1. User fees

Do any village members <u>have to pay</u> user fees at public health service?

[ ] yes, why do they have to pay? (The researcher tries to probe asymmetrical power between demand and supply, between government and people.)

[ ] no, why don't they have to pay? (The researcher tries to probe asymmetrical power between demand and supply, between government and people.)

Take note:

Protecting the vulnerable group

2. In practice today, how do patients deal with user fees when they have not enough cash at point of service?

3. Do you know the government has a policy to exempt the poor from user fees? (Indicate name of FGD members and their knowledge of exempting policy)
   [ ] yes, there is a policy
   [ ] no, there is no policy
   [ ] don't know

4. For those who know of a policy, describe the procedure how the poor are exempted

5. Exemptions in the past year

	Non-poor hh	Poor hh	Total hh	Note
How many household <u>needed</u> exemptions?				
How many household <u>got</u> exemptions? Who (put hh ID)?				
Researcher fills in the number of household who <u>needed but did not get</u> exemptions Who (put hh ID)?				
Why hh in above row did not get exemptions?				

6. From above question, describe detail of village members who got exemptions.

HH ID	Social ranking (better-off, middle, poor)	Health facility and type of service (OP or IP)	Procedure how to get exemption

Note:

7. Are the poor willing to take up exemption and why? (try to probe acceptance and stigmatization)

[ ] yes, why

[ ] no, why and how to improve

8. Do you think health staff willing to give exemption for the poor or not, and why or what evidence?

9. Are there any patients who have insufficient to cover their medical care cost?

How many.....please provide example

Case 1: Patient's name and address.....
Disease and type of services (OP or IP).....
Name of health care facility.....
How much medical bill was?.....
Why did not patient get exemption? (knowledge, attitude and/or experience on exemption).....
.....
.....
How did patient cope with medical cost?.....
.....
.....

Case 2: Patient's name and address.....
Disease and type of services (OP or IP).....
Name of health care facility.....
How much medical bill was?.....
Why did not patient get exemption? (knowledge, attitude and/or experience on exemption).....
.....
.....
How did patient cope with medical cost?.....
.....
.....

Case 3: Patient's name and address.....
Disease and type of services (OP or IP).....
Name of health care facility.....
How much medical bill was?.....
Why did not patient get exemption? (knowledge, attitude and/or experience on exemption).....
.....
.....
How did patient cope with medical cost?.....
.....
.....

Social network

10. What village members do when they have not enough money to pay medical bill?

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

11. If village members need to borrow money, where do they get borrowed money, what is the credibility and how much is the interest rate?

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

Barriers of access to public health care services: insufficient to cover treatment cost

12. Village members stop treatment because they have insufficient to cover the cost of treatment

Case 1

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Case 2

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Case 3

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Barriers of access to public health care services: due to transportation problem (cost and/or difficulty)

13. Village members do not go to health facilities when they need due to transportation problem (cost and/or difficulty)

Case 1

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Case 2

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Case 3

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Barriers of access to public health care services: due to typical culture or norm or belief of community

14. Village members do not go to health facilities or refuse services when they need due to culture or typical norm or belief of community

Case 1

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Case 2

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Case 3

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Barriers of access to public health care services: due to responsiveness of health staff

15. Village members feel they (especially the poor) lost their dignity because of health staff behaviour

Case 1

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Case 2

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Case 3

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

16. Village members feel reluctant to go to public health care provider because health staff can not understand local dialects

Case 1

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Case 2

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Case 3

Who.....
Address.....
When.....
Where (health facility).....
What disease.....
Severity of this problem.....
Outcome of patient.....
Magnitude for overall village members.....
Other comment.....
How to solve the problem.....
.....
.....

Guideline for two villages in Atsaphangthong District

1. Financial protection for the poor: acceptability?

2. Financial protection for the less-poor
    a. Voluntary or compulsory scheme
    b. Prepayment:
        i. acceptability
        ii. how much
        iii. per household or per individual
    c. Co-payment

Guideline for Health Care Provider Interview

Visit

- Greeting and general chat
- Introduce myself and team
- Introduction for the interview
- Consent questions

General Information

1. Date of interview.....
2. Time.....
3. Place of interview.....
4. Name of interviewers and seating

Start interview

Part 1 Information of interviewee

1.1 Name of interviewee.....

1.2 Age.....

1.3 Highest education.....

1.4 Experience profile

Year – Year	Position	Department	Career of work

Part 2 Overview of user fee policy

2.1 Do you know user fee policy? From which sources? If it is because of government policy, have you ever seen any document of this policy? Pls show the document.

2.2 When it started implementing in health facility, why

Part 3 Policy interpretation and implementation

3.1 User fee:

- Guidance for implementation: from which department, document or verbal, when did you get guidance
- What are the main purposes?
- Who controls the fee policy at national level and provider level?
- Adjustment of fee level

3.2 Obligatory remittance:

- What are the main purposes?
- Which level (percentage of total revenue, percentage of profit or fixed amount), Who decide
- Should the obligatory remittance be remained or not? Why? Which level?

3.3 Exemption:

- Guidance for implementation: from which department, document or verbal, when did you get guidance
- For whom 'the poor' or 'destitute'
- What are the criteria to identify 'the poor' or 'destitute'?
- Who decides means testing? What criteria are used for means testing in practice?
- Resources to finance exemptions (public resource or revenue from user fee), how to finance or how to request from government

3.4 Institutional aspects at hospital level:

- Which department is in charge
- Any guidance for hospital staff
- Who monitor and evaluate at hospital level and upper level
- Any support from MOH

Part 4 General opinions on user fee policy and protecting the poor

4.1 Advantages and disadvantages of user fees plus exemption compared to free care

4.2 Government role on protecting the poor

Part 5 Request for information of

5.1 Annual report in fiscal year 2005, 2004 and 2003

- Revenue and expenditure annual report (budget, RDF and user charge)
- Activity annual report

5.2 Whatever format report or primary data of

- The most updated fee schedule
- Patients who had been put in debt list
- Exemptions (amount, who got it)

Guideline for Policy maker Interview

Visit

- Greeting and general chat
- Introduce yourself and team
- Introduction for the interview
- Consent questions
- Ask the respondent to give permission for tape-recording

General Information

1. Date of interview.....
2. Time.....
3. Place of interview.....
4. Name of interviewers and seating

Start interview

Part 1 Information of interviewee

1.1 Name of interviewee.....

1.2 Age.....

1.3 Highest education.....

1.4 Experience profile

Year – Year	Position	Department	Career of work

Part 2 Policy formulation

2.1 Your relation with user fee policy (what position, which period)

2.2 Background of user fee policy in Lao: when it started, why, who initiated, who against

2.3 Context: International and domestic context

2.4 Why did it come with the content in Decree 52, 1995 (user fees, exemption and obligatory remittance)

2.5 Why did it come with the content in Decree in Nov 2005

Part 3 Policy Interpretation

3.1 Decree 52, 1995

3.1.1 Main purposes of Decree 52

3.1.2 User fees: what are the main purposes?

3.1.3 Obligatory remittance: what are the main purposes?, which level (percentage of total revenue, percentage of profit or fixed amount)

3.1.4 Exemptions: Who is a vulnerable group or low income?, What are the criteria to identify vulnerable group or low income?, resources to finance exemptions (public resource or revenue from user fee), how to finance

3.2 Curative Act, Nov 2005

3.2.1 Main purposes of Curative Act, Nov 2005

3.2.2 Obligatory remittance: which level (percentage of total revenue, percentage of profit or fixed amount)

3.2.3 Funds:

- Why separated funds e.g. student fund, monk fund, fund for the poor
- Resources to finance funds
- How to finance, which mechanism

3.2.4 Advantages and disadvantages of Curative Act 2005 compared to Decree 52 1995

Part 4 Policy Implementation

4.1 Process of implementation: who take action, which channel (meeting, sending policy document), how long

4.2 Guidance for implementation: Any document, from which department

4.3 User fee: Who controls the fee policy at national level and provider level? Adjustment of fee level (updating fees and income eligibility thresholds: subject to changing context)

4.4 Exemption: Who decides means testing? What criteria are used for means testing?

4.5 Funding: Public resources available to finance exemptions

4.6 Institutional aspects: which department is in charge, clear guidance, any support to implementers, who monitor and evaluate

Part 5 General opinions on user fee policy and protecting the poor

5.1 Advantages and disadvantages of user fees plus exemption compared to free care

5.2 Obligatory remittance: should be retained or not? Why? Which level?

5.3 Government role on protecting the poor

APPENDIX II

Headings and sub-headings for qualitative analysis

A) Households' experience on coping strategies

- Cost prevention
  - Not seeking care
  - Seeking care without cost
- Cost management strategies
  - Using saving
  - Selling assets
  - Borrowing
  - Getting support
  - Delaying payment
  - Exemption

B) Households' perceptions towards user fees

- Public services versus business
- Barrier to access care
- Stigma if getting free care
- Patient's responsibility

C) Providers' and policy makers' experiences and perceptions

- Objectives of user fee and exemption policy
- Expectation on user fee and exemption policy
- Process of promulgation
- Fee schedule
    - Process of setting up the fees
    - Frequency of updating the fees
- Use of fee revenues
    - Obligatory remittances
        - Process of remitting the obligatory remittances
        - How much to remit
        - Achievement of the remitting
    - Use of the rest of the fee revenues
- Exemptions
    - Entitlement (the destitute versus the poor)
    - Practices
    - Attitudes
    - Subsidization from the government on exemptions
- Reporting system of user fees and exemptions

APPENDIX III

Health care cost burden of household

District	Village	ID of HH	Wealth group	Asset index score	HH Consumption (USD/day)	% non-food	HH non-food consumption (USD/day)	Cost burden (monthly HH Health expenditure as % monthly HH non-food consumption)
1	1	01	2	-0.21635	7.01	0.12	0.84	
1	1	02	3	-1.7999	1.00	0.16	0.16	
1	1	03	3	-2.25075	1.66	0.16	0.27	
1	1	04	3	-1.13537	1.48	0.16	0.24	72.16%
1	1	05	1	0.22053	5.05	0.30	1.52	
1	1	06	2	0.37646	4.70	0.12	0.56	
1	1	07	2	-0.34937	3.68	0.12	0.44	
1	1	08	3	-0.33874	2.27	0.16	0.36	354.39%
1	1	09	2	1.12831	5.65	0.12	0.68	2.11%
1	1	10	3	-0.84237	1.66	0.16	0.27	
1	1	11	1	0.38422	4.95	0.30	1.48	
1	1	12	2	-0.70043	5.04	0.12	0.60	
1	1	13	3	-1.41335	1.66	0.16	0.27	44.39%
1	1	14	2	-0.24825	2.79	0.12	0.34	
1	1	15	3	-0.98639	1.18	0.16	0.19	
1	1	16	2	-0.22979	3.81	0.12	0.46	
1	1	17	3	-1.63116	2.40	0.16	0.38	7.43%
1	1	18	2	-0.05405	2.52	0.12	0.30	
1	1	19	3	-1.17687	1.00	0.16	0.16	
1	1	20	2	0.92975	3.61	0.12	0.43	
1	1	21	2	1.08298	2.25	0.12	0.27	
1	1	22	3	-1.38417	2.10	0.16	0.34	
1	1	23	2	-1.82515	2.32	0.12	0.28	
1	1	24	2	-1.56675	2.04	0.12	0.25	11.65%
1	1	25	2	-1.13706	3.00	0.12	0.36	
1	1	26	2	-0.36744	3.27	0.12	0.39	
1	1	27	2	0.0671	3.75	0.12	0.45	109.66%
1	1	28	2	1.46578	3.47	0.12	0.42	1695.06%
1	1	29	2	-1.09447	2.45	0.12	0.29	
1	1	30	3	-1.16025	1.53	0.16	0.24	
1	1	31	2	-0.8284	2.79	0.12	0.34	
1	1	32	3	-0.25202	3.71	0.16	0.59	
1	1	33	2	-0.91604	1.29	0.12	0.16	
1	1	34	2	0.19385	4.09	0.12	0.49	1.46%
1	1	35	2	0.02527	4.36	0.12	0.52	
1	1	36	2	0.26935	6.61	0.12	0.79	16.84%
1	1	37	2	0.8823	6.20	0.12	0.74	
1	1	38	2	-1.0243	3.54	0.12	0.42	
1	1	39	2	-0.01826	4.70	0.12	0.56	88.68%
1	1	40	1	1.82362	7.26	0.30	2.18	
1	1	41	2	0.61927	3.61	0.12	0.43	
1	1	42	3	-0.72379	2.79	0.16	0.45	

District	Village	ID of HH	Wealth group	Asset index score	HH Consumption (USD/day)	% non-food	HH non-food consumption (USD/day)	Cost burden (monthly HH Health expenditure as % monthly HH non-food consumption)
1	1	43	3	-1.54065	1.97	0.16	0.31	
1	1	44	2	-0.9587	3.81	0.12	0.46	
1	1	45	2	-0.79108	3.47	0.12	0.42	
1	1	46	2	0.13301	4.02	0.12	0.48	72.59%
1	1	47	2	-0.19207	3.00	0.12	0.36	
1	1	48	2	-1.63148	4.02	0.12	0.48	
1	1	49	2	0.2232	5.72	0.12	0.69	42.66%
1	1	50	2	-0.02165	3.00	0.12	0.36	
1	1	51	3	-1.09554	2.97	0.16	0.48	
1	1	52	3	-0.67264	1.53	0.16	0.24	
1	1	53	2	-1.37552	2.79	0.12	0.34	
1	1	54	1	1.70813	10.11	0.30	3.03	
1	1	55	2	0.42637	3.40	0.12	0.41	
1	1	56	1	1.02653	2.00	0.30	0.60	
1	1	57	2	-0.78398	1.84	0.12	0.22	
1	1	58	1	1.25139	8.95	0.30	2.68	
1	1	59	1	0.81829	8.74	0.30	2.62	
1	1	60	2	1.36364	6.74	0.12	0.81	0.88%
1	1	61	2	-0.58475	3.47	0.12	0.42	
1	1	62	2	-0.73472	3.54	0.12	0.42	
1	2	01	2	-0.04706	3.03	0.20	0.61	15.32%
1	2	02	1	1.32283	6.53	0.23	1.50	11.90%
1	2	03	1	0.41286	2.68	0.23	0.62	78.88%
1	2	04	1	1.08192	7.20	0.23	1.65	10.36%
1	2	05	2	-0.05117	1.99	0.20	0.40	1.79%
1	2	06	2	0.16901	1.87	0.20	0.37	
1	2	07	2	1.10223	3.74	0.20	0.75	1.91%
1	2	08	1	0.87225	7.20	0.23	1.65	
1	2	09	1	1.95545	9.20	0.23	2.12	6.97%
1	2	10	2	0.51054	2.70	0.20	0.54	45.41%
1	2	11	1	1.1052	3.76	0.23	0.87	5.55%
1	2	12	1	1.02474	5.02	0.23	1.15	
1	2	13	3	-0.84815	1.89	0.24	0.45	17.88%
1	2	14	1	1.41283	3.85	0.23	0.89	7.67%
1	2	15	3	0.19412	0.99	0.24	0.24	18.13%
1	2	16	2	0.25746	1.70	0.20	0.34	9.79%
1	2	17	2	-0.68368	1.12	0.20	0.22	
1	2	18	2	1.04431	4.32	0.20	0.86	119.93%
1	2	19	2	-0.60505	2.12	0.20	0.42	
1	2	20	3	-2.19226	0.72	0.24	0.17	
1	2	21	2	0.73767	1.99	0.20	0.40	25.09%
1	2	22	2	-0.51876	0.42	0.20	0.08	
1	2	23	3	-0.51383	0.61	0.24	0.15	
1	2	24	2	-0.12503	1.54	0.20	0.31	11.62%
1	2	25	3	-1.59037	0.91	0.24	0.22	
1	2	26	1	1.82334	4.18	0.23	0.96	
1	2	27	2	-0.27318	2.53	0.20	0.51	

District	Village	ID of HH	Wealth group	Asset index score	HH Consumption (USD/day)	% non-food	HH non-food consumption (USD/day)	Cost burden (monthly HH Health expenditure as % monthly HH non-food consumption)
1	2	28	3	-0.02466	1.52	0.24	0.36	9.81%
1	2	29	2	0.9132	1.45	0.20	0.29	
1	2	30	3	-1.69707	1.20	0.24	0.29	
1	2	31	3	0.23161	1.01	0.24	0.24	
1	2	32	2	0.13404	1.99	0.20	0.40	
1	2	33	3	-1.06139	2.13	0.24	0.51	
1	2	34	2	0.21341	1.99	0.20	0.40	
2	3	01	1	2.2616	7.52	0.36	2.71	
2	3	02	1	1.56818	10.26	0.36	3.69	
2	3	03	1	1.27306	6.91	0.36	2.49	4.97%
2	3	04	1	0.21498	4.47	0.36	1.61	12.48%
2	3	05	1	1.16488	4.17	0.36	1.50	
2	3	06	1	1.03964	3.15	0.36	1.13	
2	3	07	1	1.64771	8.64	0.36	3.11	7.63%
2	3	08	3	-1.76872	2.84	0.18	0.51	
2	3	09	2	0.46448	1.10	0.20	0.22	24.56%
2	3	10	3	-1.48967	1.48	0.18	0.27	20.06%
2	3	11	2	0.06354	2.71	0.20	0.54	
2	3	12	2	-0.55309	3.76	0.20	0.75	1.70%
2	3	13	2	0.4237	2.24	0.20	0.45	
2	3	14	1	1.96205	6.60	0.36	2.38	
2	3	15	1	1.03472	4.57	0.36	1.65	2.97%
2	3	16	1	-0.57826	5.18	0.36	1.87	2.19%
2	3	17	2	-0.73069	1.82	0.20	0.36	12.98%
2	3	18	1	1.03093	7.82	0.36	2.82	3.06%
2	3	19	1	1.61112	4.47	0.36	1.61	
2	3	20	2	0.85585	1.14	0.20	0.23	3.13%
2	3	21	3	-0.34991	2.71	0.18	0.49	
2	3	22	3	-0.86184	2.06	0.18	0.37	
2	3	23	2	0.17776	1.69	0.20	0.34	
2	3	24	2	1.0223	2.20	0.20	0.44	
2	3	25	3	-0.35979	3.61	0.18	0.65	
2	3	26	1	0.87916	6.10	0.36	2.19	
2	3	27	2	0.76247	1.52	0.20	0.30	4.69%
2	3	28	1	0.92229	4.17	0.36	1.50	23.81%
2	3	29	2	0.17384	2.75	0.20	0.55	
2	3	30	3	-0.671	4.13	0.18	0.74	
2	3	31	2	-0.44314	0.97	0.20	0.19	
2	3	32	3	-0.62106	1.74	0.18	0.31	
2	3	33	3	-0.50707	4.00	0.18	0.72	
2	3	34	3	-0.84659	1.23	0.18	0.22	
2	3	35	3	-0.59769	1.55	0.18	0.28	
2	3	36	3	-1.39164	1.48	0.18	0.27	
2	4	01	2	0.5504	2.69	0.28	0.75	127.04%
2	4	02	2	0.34407	4.67	0.28	1.31	
2	4	03	3	-0.99685	2.19	0.33	0.72	2.47%
2	4	04	2	-0.43769	3.82	0.28	1.07	

District	Village	ID of HH	Wealth group	Asset index score	HH Consumption (USD/day)	% non-food	HH non-food consumption (USD/day)	Cost burden (monthly HH Health expenditure as % monthly HH non-food consumption)
2	4	05	3	-1.26988	2.19	0.33	0.72	
2	4	06	2	0.18446	4.53	0.28	1.27	6.19%
2	4	07	2	-0.10857	4.67	0.28	1.31	13.05%
2	4	08	1	0.45958	7.52	0.39	2.93	
2	4	09	3	-1.08201	2.68	0.33	0.89	
2	4	10	3	-0.81287	2.11	0.33	0.70	
2	4	11	1	-0.15889	9.91	0.39	3.87	8.59%
2	4	12	3	-0.28612	1.54	0.33	0.51	
2	4	13	1	0.6548	4.78	0.39	1.87	
2	4	14	1	2.57273	8.37	0.39	3.27	3.28%
2	4	15	1	1.22904	15.72	0.39	6.13	
2	4	16	1	1.6155	11.79	0.39	4.60	3.11%
2	4	17	1	0.41445	7.18	0.39	2.80	
2	4	18	2	0.4117	5.81	0.28	1.63	
2	4	19	3	0.67454	4.31	0.33	1.42	1.51%
2	4	20	3	-0.47737	3.09	0.33	1.02	
2	4	21	1	-0.22644	6.32	0.39	2.47	13.12%
2	4	22	1	1.04826	9.40	0.39	3.67	11.84%
2	4	23	1	-0.02664	9.40	0.39	3.67	1.17%
2	4	24	1	1.23811	4.44	0.39	1.73	1.08%
2	4	25	2	1.32929	5.52	0.28	1.55	0.92%
2	4	26	2	-0.81889	5.66	0.28	1.59	9.28%
2	4	27	1	0.80395	7.52	0.39	2.93	
2	4	28	1	1.75906	12.30	0.39	4.80	3.18%
2	4	29	3	0.24373	2.60	0.33	0.86	
2	4	30	3	-1.4482	2.19	0.33	0.72	
2	4	31	2	0.08122	3.97	0.28	1.11	7.72%
2	4	32	1	0.34274	3.25	0.39	1.27	
2	4	33	3	-0.52321	3.33	0.33	1.10	5.20%
2	4	34	2	-0.38969	5.95	0.28	1.67	
2	4	35	3	-0.85779	3.01	0.33	0.99	
2	4	36	2	-1.17827	6.23	0.28	1.74	23.40%
2	4	37	3	-0.59715	3.01	0.33	0.99	
2	4	38	3	-1.33645	2.19	0.33	0.72	
2	4	39	1	1.35563	5.64	0.39	2.20	1.01%
2	4	40	2	0.28292	7.79	0.28	2.18	0.66%

Note: District 1 = Phine district, District 2 = APT district
Village 1 = TAL, Village 2 = KY, Village 3 = SPX, Village 4 = KK

APPENDIX IV

Decree 52 PM (Lao version)

ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນລາວ
ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະນາຖາວອນ
****

ສຳນັກງານນາຍົກລັດຖະມົນຕີ ເລກທີ 52 /ນຍ

ດຳລັດ
ວ່າດ້ວຍການບໍລິການການແພດ

- ອີງຕາມ ມະຕິກອງປະຊຸມໃຫ່ຍຄັ້ງທີ 5 ຂອງພັກປະຊາຊົນປະຕິວັດລາວ ກ່ຽວກັບ ນະໂຍບາຍການປົ່ນປົວບໍ່ເສັຍຄ່າ ໃຫ້ຜູ້ທີ່ມີລາຍໄດ້ຕ່ຳ.
- ຕາມ ການສະເໜີ ຂອງລັດຖະມົນຕີ ກະຊວງສາທາລະນະສຸກ.

ນາຍົກລັດຖະມົນຕີ ອອກດຳລັດ :

ໝວດທີ I
ຫລັກການລວມ

ມາດຕາ 1 : ການກວດພະຍາດ ແລະ ການປົ່ນປົວ ໃຫ້ພະນັກງານລັດຖະກອນ ທີ່ສັງກັດຢູ່ໃນການຈັດຕັ້ງຂອງພັກ, ຂອງລັດ ແລະພະນັກງານເບ້ຍບຳນານ ແມ່ນບໍ່ໄດ້ເສັຍຄ່າດ້ວຍຕົນເອງ.

ມາດຕາ 2 : ການກວດພະຍາດ ແລະ ປົ່ນປົວ ໃຫ້ລູກພະນັກງານ ລັດຖະກອນ, ລູກຂອງພະນັກງານເບ້ຍບຳນານ ທີ່ຍັງບໍ່ທັນເຖິງອາຍຸກະສຽນ 18 ປີ ພ້ອມດ້ວຍເມັຍ ຫຼື ຜົວຂອງພະນັກງານລັດຖະກອນ ແລະ ຂອງພະນັກງານເບ້ຍບຳນານແມ່ນບໍ່ໄດ້ເສັຍຄ່າດ້ວຍຕົນເອງ (ສຳລັບຜູ້ທີ່ບໍ່ໄດ້ເຮັດວຽກຢູ່ອົງການໃດອົງການຫນຶ່ງ)

ມາດຕາ 3 : ການກວດ ແລະ ປົ່ນປົວພະຍາດ ໃຫ້ນັກຮຽນ, ນັກສຶກສາ, ພະສົງສາມະເນນແລະ ປະຊາຊົນຜູ້ທີ່ທຸກຍາກຂາດເຂີນ ຫຼື ຜູ້ທີ່ມີລາຍໄດ້ຕ່ຳ ແມ່ນບໍ່ໄດ້ເສັຍຄ່າ.

ມາດຕາ 4 : ການກວດ ແລະ ປິ່ນປົວ ໃຫ້ນັກທຸລະກິດ, ຊາວຄ້າຂາຍ, ຜູ້ອອກແຮງງານ, ຜູ້ທີ່ມີ... ອິດສະລະອື່ນໆ ນອກຈາກບຸກຄົນຜູ້ທີ່ໄດ້ບົ່ງອອກ ໃນມາດຕາ 1,2 ແລະ 3 ແລ້ວຕ້ອງ) ໄດ້ເສັຍຄ່າດ້ວຍຕົນເອງ.

ມາດຕາ 5 : ໃນທຸກໆກໍລະນີ, ບໍ່ວ່າເຈັບກະທັນຫັນ ຫຼື ທຳມະດາ, ຄົນເຈັບສາມາດເຂົ້າຮັບການ ກວດ ແລະ ປິ່ນປົວ ຢູ່ຕາມສະຖານທີ່ບໍລິການ ສາທາລະນະສຸກ ຂອງລັດໄດ້.

ໝວດທີ II
ຫລັກການໃນການໄລ່ລຽງແລະເກັບຄ່າ

ມາດຕາ 6 : ການຈ່າຍຄ່າບໍລິການ ໃຫ້ໄລ່ລຽງເກັບຄ່າ ຕາມລາຍການດັ່ງນີ້ :

1/ ຄ່າທຳນຽມເອກະສານ
2/ ຄ່າສິ້ນເປືອງວັດຖຸອຸປະກອນ ບໍ່ໃຫ້ຄ່າ(?)
3/ ຄ່າກວດວິເຄາະ, ສ່ອງໄຟຟ້າ ແລະ ກວດລັງສີເລັກເຕັກນິກອື່ນໆ
4/ ຄ່າຢາປິ່ນປົວ
5/ ຄ່າປະກອບອະໄວຍະວະທຽມ
6/ ຄ່າປິ່ນປົວ(ຜ່າຕັດ, ອົບນວດ, ກາຍະພາບບຳບັດ, ປັກເຂັມ......)
7/ ຄ່າຫ້ອງນອນປິ່ນປົວ

ມາດຕາ 7 : ເພື່ອຕອບສະໜອງການບໍລິການ ໃຫ້ຄົນເຈັບ, ໂຮງພະຍາບານສ້າງເງື່ອນໄຂຄື:

1/ ຈັດຫ້ອງຕາມເປົ້າໝາຍ ເພື່ອການບໍລິການຮັບໃຊ້ຄົນເຈັບ.
2/ ເອົາໃຈໃສ່ການບໍລິການ, ການກວດກາ ແລະ ປິ່ນປົວພະຍາດ ໃນທຸກໆກໍລະນີ
3/ ຈັດຕັ້ງລະບົບການຄິດໄລ່, ເກັບເງິນ ແລະ ບັນຊີ ໃຫ້ຖືກຕ້ອງຕາມລະບຽບການ ເງິນ.

ໝວດທີ III
ຂັ້ນເຂດປະຕິບັດ

ມາດຕາ 8 : ການຈ່າຍຄ່າບໍລິການ-ການແພດຕັ້ງແຕ່ໂຮງພະຍາບານສູນກາງ, ໂຮງພະຍາບານ ແຂວງກຳແພງນະຄອນ ແລະ ໂຮງໝໍເມືອງ ໃຫ້ປະຕິບັດ ຕາມການຕົກລົງອະນຸມັດ ຂອງກະຊວງສາທາລະນະສຸກ ໂດຍອີງຕາມການສະເໜີຂອງແຕ່ລະສະຖານທີ່ ບໍລິການ ສາທາລະນະສຸກ ຂອງລັດ

(+) ສຳລັບ ສຸກສາລາເຂດ, ບ້ານ, ແມ່ນບໍ່ໄດ້ເກັບຄ່າບໍລິການກວດ, ຄ່ານອນ ປິ່ນປົວ ແຕ່ຄິດໄລ່ຄ່າຢາຄືນ.

ໝວດທີ IV
ການປະກອບເອກະສານຢັ້ງຢືນເພື່ອປິ່ນປົວບໍ່ເສັຍຄ່າ

ມາດຕາ 9 : ສຳລັບພະນັກງານ ລັດຖະກອນ ໃຫ້ຖືເອົາປຶ້ມຫັກເງິນ 6% ແລະ ພະນັກງານເບ້ຍບຳນານ ໃຫ້ຖືເອົາບັດຮັບເງິນບຳນານ ເປັນຫລັກຖານຢັ້ງຢືນເພື່ອບໍ່ໄດ້ຈ່າຍຄ່າກວດ ແລະ ປິ່ນປົວດ້ວຍຕົນເອງ.

ມາດຕາ 10 : ສຳລັບປະຊາຊົນຜູ້ທີ່ມີລາຍໄດ້ຕ່ຳ, ທາງໂຮງພະຍາບານ ຖືເອົາບັດ ຫຼື ໜັງສືຢັ້ງຢືນ ທີ່ ກະຊວງແຮງງານ ແລະ ສະຫວັດດີການສັງຄົມ, ພະແນກສະຫວັດດີການສັງຄົມ ແຂວງ ຫຼື ນາຍບ້ານອອກໃຫ້ເປັນຫລັກຖານ ຢັ້ງຢືນຖືກຕ້ອງຕາມຄວາມເປັນຈິງ.

ມາດຕາ 11 : ສຳລັບນັກຮຽນ, ນັກສຶກສາ, ພະສົງສາມະເນນທາງໂຮງພະຍາບານ, ໂຮງໝໍຖືເອົາ ບັດປະຈຳຕົວ, ບັດຮັບເບ້ຍລ້ຽງ ຫຼື ໃບຢັ້ງຢືນຈາກກະຊວງສຶກສາ ຫຼື ອົງການ ທີ່ ກ່ຽວຂ້ອງທີ່ອອກໃຫ້.

ໝວດທີ V
ຫລັກການໄລ່ລ່ຽງແລະສຳລະສະສາງ

ມາດຕາ 12 : ຄົງປະກັນສັງຄົມມີໜ້າທີ່ຈ່າຍເງິນຄ່າກວດ ແລະ ປິ່ນປົວໃຫ້ຜູ້ປ່ວຍທີ່ໄດ້ລະບຸໄວ້ໃນ ມາດຕາ 1ຕາມໃບສະເໜີ ໃຊ້ຈ່າຍຈາກໂຮງພະຍາບານແຕ່ລະຂັ້ນ, ໂດຍອີງຕາມຂໍ້ ກຳນົດຂອງ ກະຊວງແຮງງານ ແລະ ສະຫວັດດີການສັງຄົມ.

ມາດຕາ 13 : ກະຊວງການເງິນ ແບ່ງງົບປະມານ ໃຫ້ບັນດາໂຮງພະຍາບານ, ໂຮງໝໍແຕ່ລະຂັ້ນ ເພື່ອກວດ, ປິ່ນປົວ ແລະ ບຳລຸງຮັກສາສຸຂະພາບບຸກຄົນທີ່ໄດ້ລະບຸໄວ້ ໃນມາດຕາ 2 ແລະ 3 ໂດຍແມ່ນ ກະຊວງສາທາລະນະສຸກ ເປັນຜູ້ຂຶ້ນງົບປະມານປະຈຳປີ.

ມາດຕາ 14 : ເພື່ອຄວາມເປັນເອກະພາບໃນການຈັດຕັ້ງປະຕິບັດ ກະຊວງສາທາລະນະສຸກ ແຈ້ງມູນ ຄ່າຄົງກຳນົດໃນມາດຕາ 6 ຂອງໝວດທີ II ໃຫ້ກະຊວງການເງິນ ແລະ ລາຍຮັບທີ່ໄດ້ ຈາກຄ່າກວດ, ຄ່າປິ່ນປົວ , ຈະຄິດໄລ່ອອກ 20% ເປັນພັນທະຖອກໃຫ້ງົບປະມານ, ສ່ວນເຫລືອນັ້ນແມ່ນນຳໃຊ້ຕາມແຜນການ, ເມື່ອບໍ່ພໍໃຫ້ງົບປະມານລັດຖິ່ມຂຸມ.

ໝວດທີ VI
ບົດບັນຍັດສຸດທ້າຍ

ມາດຕາ 15 : ມອບໃຫ້ ກະຊວງສາທາລະນະສຸກ ແລະ ກະຊວງແຮງງານ ແລະ ສະຫວັດດີການ-ສັງ
ຄົມເປັນຜູ້ຜັນຂະຫຍາຍອອກບົດແນະນຳລະອຽດໂຮງພະຍາບານສູນກາງ, ສະຖ[illegible]ນ,
ພະແນກສາທາລະນະສຸກ, ພະແນກແຮງງານ ແລະ ສະຫວັດດີການສັງຄົມຂອງແຂວງ
ກຳແພງນະຄອນ, ເຂດພິເສດ, ລົງຮອດພື້ນຖານເພື່ອຮັບປະກັນໃຫ້ແກ່ການປະຕິບັດ
ດຳລັດສະບັບນີ້ຢ່າງເຂັ້ມງວດ.

ມາດຕາ 16 : ສຳນັກງານນາຍົກ ລັດຖະມົນຕີ, ບັນດາກະຊວງ, ອົງການທຽບເທົ່າ ແລະ ອຳນາດການ
ປົກຄອງທ້ອງຖິ່ນ ທຸກຂັ້ນມີໜ້າທີ່ຈັດຕັ້ງປະຕິບັດ ຕາມພາລະບົດບາດຂອງຕົນ.

ມາດຕາ 17 : ດຳລັດສະບັບນີ້ ມີຜົນສັກສິດນັບແຕ່ມື້ລົງລາຍເຊັນເປັນຕົ້ນໄປ.

ວຽງຈັນ, ວັນທີ 26 JUN 1995
ນາຍົກລັດຖະມົນຕີ

ຄຳໃດ ສີພັນດອນ

APPENDIX V

Decree 52 PM
(English version – informal translation)

LAO PEOPLE'S DEMOCRATIC REPUBLIC
PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY

The Prime Minister's Office **No. 52/PM**

Decree of Medical Services

- Based on the resolution from the 5th meeting of the Lao People's Revolutionary Party about the exemption policy for low income people
- Based on the proposal by the Minister of Health

The Prime Minister has decided:

PART I Overall concept

Article 1: Public workers who work for the Party and government employees, including retired people, will receive medical investigation and treatment without paying user charges from their own pocket.

Article 2: Spouse and dependents (under 18 years of age) of public workers who work for the Party and government employees, including retired people, will receive medical investigation and treatment without paying user charges from their own pocket. (This applies only to those who are not in any institute.)

Article 3: Students, monks and the poor or those with low income will receive medical investigation and treatment without paying user charges from their own pocket.

Article 4: Citizens who are not covered by Articles 1, 2 or 3 will have to pay user charges for medical investigation and treatment from their own pocket.

Article 5: For every event, either emergency or normal illnesses, patients will have access to and use of medical investigation and treatment at public health care providers.

PART II The concept of setting up and collecting user fees

Article 6: User fees can be set and charged for seven items as follows;

1. Medical records and other documents
2. Supplies
3. Investigation services i.e. laboratory, radiology and other diagnosis
4. Medicines for treatment purposes
5. Medical appliances for physical therapy
6. Charges for treatment (e.g. surgery, rehabilitation, acupuncture)
7. Room and board

Article 7: In order to serve patient's needs, hospital will ensure;

1. provision of a room for patient
2. enthusiastic provision of service, investigation and treatment for every event
3. establishment of a system of setting up and collecting user fees and reporting according to the financial rules

PART III Activities

Article 8: The Central Hospital, Provincial Hospital and District Hospital will manage and operate the user fee system according to the guidelines issued by the Ministry of Health which depends on the individual proposal of each public health care provider.

Any services at health centres will be provided free of charge. A charge is permitted for medicines.

PART IV Confirmation for entitlement to exemptions

Article 9: Public workers who work for the Party and government employees can use documentary proof of their contribution (6% of salary to the Government Employee Scheme) to confirm their entitlement to exemptions. Retired people can use documentary proof of receiving an old age pension to confirm their entitlement to exemptions.

Article 10: For the poor or people with low income people, the hospital will accept their entitlement according to attestation issued by Ministry of Labour and Social

Welfare or by Department of Social Welfare at Provincial Governor or by village heads.

Article 11: For students and monks, the hospital will accept their entitlement according to their (student or monk) card or attestation issued by the Ministry of Education or by a related institution.

PART V Payment procedure

Article 12: Patients covered in article 1 will be reimbursed for user fees from Social Security Funds by submitting the hospital's receipt to the Fund. This will depend on the guidelines of the Ministry of Labour and Social Welfare.

Article 13: The Ministry of Finance provides government budget to public health providers at all levels who serve patients covered in Article 2 and 3. The Ministry of Health is responsible for estimating annual budget and submitting a budget plan.

Article 14: For uniformity in management, the Ministry of Health has declared the total amount of user fees in Article 6 to the Ministry of Finance. Twenty per cent of the user fees from investigation and treatment will be deducted and this amount will be remitted to the general revenue of the government. The rest of the fee revenue can be used by hospitals according to their plans, and if the revenue is inadequate, the government will subsidize accordingly.

PART VI Final part

Article 15: For the implementation of this decree, the Ministry of Health and Ministry of Labour and Social Welfare are responsible for issuing detailed guidelines in order to facilitate the activities of the Central Hospital, Department of Health, Department of Labour and Social Welfare at provincial and local level. This will assure an effective implementation of this decree.

Article 16: The Prime Minister's Office, Ministers, other relevant organizations and local governors at all levels have responsibility for the implementation of this decree according to their relevant roles.

Article 17: This decree is valid from the date of signature.

Vientiane, 26 June 1995

Prime Minister