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OF HYGIENE &
TROPICAL MEDICINE

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EXECUTIVE SUMMARY

Many countries have introduced, or increased the levels of, health care user fees in recent years. The common response to concerns about the equity impact of such fees has been to emphasise the need to introduce exemption mechanisms which protect the poor and vulnerable from their payment. However, little is known about the feasibility of such mechanisms or what features of design and organisation enhance their effectiveness.

The research reported here seeks to contribute to international understanding of exemption mechanisms by assessment of Thailand's Low Income Card (LIC) Scheme. Through the LIC scheme, the poor can apply for identification cards which enable them and their families to obtain free care at public health facilities[1]. Thailand is one of the few countries with any experience in implementing a national exemption policy and, at the time of this study, had nearly twenty years of experience from which to learn. This research also seeks to contribute to policy debates within Thailand concerning how to expand further health insurance coverage, given evidence that around one third of the population is not covered by any benefit scheme.

The research involved two levels of analysis and all work was undertaken in 1994-95. The first, based on document review and interviews with policy-makers, provides evidence of the effectiveness of the LIC in reaching only the poor and identifies how the LIC has evolved over time. The second provides evidence from the community-level of the practice of LIC implementation and of the factors facilitating and constraining LIC effectiveness. Undertaken in three relatively low income communities, two rural and one peri-urban, these local level studies were undertaken using primarily qualitative data collection approaches. Although the experience of the selected communities cannot be easily generalised to other settings, these case studies do allow detailed exploration of the complexity of implementation experience. Together the two levels of analysis allow three key questions to be addressed:

- do the poor really benefit from the LIC? and, if so, in what way?
- what influences the pattern of LIC benefit distribution?
- can the LIC be strengthened to offer greater protection to the poor? and if so, how?

The LIC is part of the overall Medical Welfare Scheme of Thailand. This Scheme offers protection from payment to various groups, including both the poor and more privileged groups such as veterans, monks, village health volunteers, and Tambon[2] and village officials. The poor can both access the LIC and ask for exemption on presentation at a health facility (termed Type B exemption), requiring an interview with social workers. First introduced in 1981, the LIC had three main design features:

- the target group was defined as single people earning less than 1500 Baht per month and married couples whose total income was less than 2000 Baht per month;
- members of the target group were given a card to present to health facilities, and this card was to be renewed every three years;
- community-based screening was applied to determine who was eligible for a card, primarily involving community leaders.

Four subsequent rounds of card allocation had occurred at the time of this study, although the round of 1994/95 was still not quite complete[3]. Each allocation round has involved revisions to the regulations, to tighten the procedures. Several revisions have focused on strengthening community-based screening processes by involving a wider range of key participants and, in particular, village health volunteers; some others have encouraged village heads to be more

1 The most recent set of changes in the design of the scheme includes a change so that the cards now only cover the individual rather than the household.

2 The term *Tambon* refers to the sub-district administrative level

3 A sixth card-allocation round was undertaken in 1997/98.

proactive in seeking out those needing protection. The 1994/95 revisions involved raising the income thresholds to 2000 Baht per month for single people and 2800 Baht per month for couples, and introducing a migrant card for a group that had proved particularly difficult to protect in the past. The revisions reflect difficulties experienced with implementation, and particularly highlight the problem of ensuring that the eligible target group do access the LIC.

Available survey data[4,5] point both to improvements in LIC effectiveness over time, and some continuing problems. Despite a dip in the mid-1980s, the total number of cardholders increased over time so that by the early 1990s around 20% of the total population was covered by the LIC. More importantly, coverage of the target group also appears to have increased from 30-40% in the late 1980s to around 80% in the early 1990s. On the other hand, the regional distribution of cardholders appears to be inequitable. Data from 1992 indicate that the poorest Northeast Region's share of cardholders is less than its share of the country's poor (49% vs. 54%), whilst nationally around 20% of the core poor (those whose incomes fall below the national poverty line) were still unprotected in 1990. Some data also suggest that there was some 'leakage', i.e. that maybe as many as 20% of cardholders were non-eligible groups. Finally, the overall incidence of health care expenditure clearly suggests that the poor are not well protected from health care payments, and spend a greater proportion of their income on health care than more wealthy groups. A 1993 study (Pannarunothai & Mills 1993), for example, found that those holding the LIC spent 6.1% of their annual income on health as compared to the 0.6%-2.3% spent by other insured groups (such as civil servants). These data were broadly confirmed by this study as interviews at a local level both directly identified eligible households which did not hold an LIC and picked up reports that non-eligible households were often allocated an LIC. Overall, therefore, whilst the protection the LIC offers to its target group has improved over time, there continue to be important problems with its effectiveness.

Although the local level studies provide evidence that the LIC is generally highly regarded as a protection against the cost of care[6], they also indicate that effectiveness is undermined by a combination of problems in practice and issues to do with health care seeking behaviour. The range of problems can be grouped into three categories: administration problems; socio-cultural problems; and informational problems (Gilson *et al.*, 1995).

Administration problems:

- a lack of clarity in relation to the regularly revised procedures for allocating the LIC;
- a failure to plan implementation carefully enough to predict and offset potential problems of practice;
- poor experience in relation to the care provided which discourages some low income people from applying for the card in subsequent allocation rounds, and deters its use by these groups even when they do hold it;
- problems with the perceived quality, access to or cost of existing public services, which deter their use regardless of whether or not people hold the LIC.

Socio-cultural problems:

- the promotion of leakage and under-coverage by local personality, political and socio-cultural influences;
- the continued preference for private sources of care because of its perceived better quality than public care;

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4 Rural Health Division, Ministry of Public Health data (various years); RHD/Mahidol, 1988; Mongolsmai, 1993a; Supachutikul 1995.

5 Unfortunately, the most recent coverage patterns cannot be clearly identified due to data weaknesses.

6 And even show that it is seen as a protection in cases of chronic or severe illness for higher income groups.

- the potential negative influence of local health workers over allocation processes and health care utilisation;
- the multiple vulnerabilities of the low income, which deter them from receiving/applying for a card and from using it, even when they have one.

Informational problems:
- difficulties in using the income criteria at village level to determine, in a fair way, who is poorest and so eligible to receive the card.

Two other factors may also influence the effectiveness of the scheme. Whilst the budget available for the Medical Welfare Scheme has increased over time it has been both inequitably allocated between provinces and may be insufficient to meet the total costs of health care provided to the poorest. These findings may partially explain the provision of care perceived to be of poor quality, in turn leading to limited utilisation of available services. However, the local level investigations carried out in this study also indicate that perceived poor quality is not solely related to resource constraints. Whilst the failure to provide 'strong' injection drugs may result from cost-containment practices, it may also appropriately reflect rational drug prescribing (and so imply good professional quality of care). Many other problems generating perceptions of bad care seem to be rooted in poor health worker behaviour and morale, in which low salaries may be a factor, but which international experience suggests is likely also to be related to systemic issues such as inadequate supervision and an environment which does not promote initiative and independent decision-making. Judging the impact of resource constraints on the quality of care available to cardholders would require professional assessments of the quality of available care and of the efficiency with which the available resources are used. Both issues were beyond the scope of this study.

The final factor that the in-depth case studies hinted may influence LIC implementation effectiveness is the existence of several benefit schemes. There is, in particular, clear evidence of the substantial use of type B exemptions at hospital level. This exemption option is valued by community members because it ensures free or reduced price access to care in times of great need, and may be both easier to access and less embarrassing to use than the LIC. However, it may deter some from obtaining and using the LIC. In the communities surveyed the LIC appeared to be preferred over other 'insurance' cards.

These findings suggest that LIC implementation might be improved by further steps to strengthen procedures and by specific steps to promote general levels of health care utilisation. However, given the current successes of the LIC scheme, policy-makers must consider whether or not further effort to improve effectiveness is justified. This depends not only on the feasibility and cost of the necessary measures, but also on the degree of improved protection of the low-income group that can be achieved. The extent to which leakage and under-coverage can be further reduced over time is simply unclear and the whole LIC experience suggests that there will always be some problems. The evidence of this admittedly small-scale study points to a particularly intractable issue which must be addressed - the multi-faceted vulnerabilities from which the poor suffer. Strengthened card allocation processes and service provision practices are simply unlikely by themselves to break through this web of vulnerability. Instead, alternative policy options are likely to be required - focusing both on health care financing and on a broader package of interventions to address the needs of the poorest. Thai policy-makers appear to face two sets of choices in seeking to increase the extent to which the needs of the poorest are met:

1. largely accept the status quo in relation to the LIC (though making incremental changes to address some of the continuing problems), versus radical overhaul of existing health care financing and provision policies; or

2. retain a health care vision with limited consideration of the real needs of the poorest, versus using the health needs of the poorest as a rallying cry for a more effective approach to addressing their real needs.

Other countries can also draw several lessons from the Thai LIC experience. First, the experience suggests that the key elements of 'success' in relation to exemption mechanisms include:

- a balance of central guidance and local decision-making;
- the inclusion of a range of interest groups in local decision-making;
- the establishment of clear income criteria but an acceptance that they will be used flexibly in practice;
- linking the introduction of exemptions to efforts to improve perceived quality of care, to encourage the use of the exemption mechanism in practice;
- careful planning for implementation, including training and information dissemination to health workers and those benefiting;
- detailed and specific supervision for those making key decisions in implementation.

However, secondly, the experience illustrates the importance of 'learning-through-doing' and of developing such a mechanism over time and in response to experience of its implementation. Lessons from Thailand may be useful in developing initial ideas for a new scheme elsewhere, but must be adapted to local circumstances and must be allowed to evolve over time. It is, therefore, particularly important to develop clear monitoring and evaluation procedures which allow both effectiveness and the problems of practice to be identified.

Thirdly, and finally, the Thai experience emphasises that there are no easy solutions to the problems of serving and protecting the most vulnerable and marginalised. Even after nearly twenty years of experience, the LIC does not reach all of the poorest and barriers to both LIC and health care use include deep-rooted socio-cultural practices. Is it enough that the LIC protects a significant proportion of the low income and that public care provides an important safety net for all? Or should public health systems concentrate on serving the most vulnerable and marginalised? Even with that goal, how could the public health system seek to reach it? And is the provision of health care really likely to address the needs of this group?

Identifying these difficult questions helps to understand the equity challenges facing health systems and to move beyond the simple view that exemption mechanisms are the answer to the potential equity problems of user fees. The discussion of the challenges and choices facing policy-makers in Thailand emphasises that meeting the needs of the poorest requires wide-ranging policy action both within and outside the formal health system.

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PART I

1. INTRODUCTION

Concerns about the equity impact of user fee policies have led to a focus on the potential contribution of exemption mechanisms in protecting the poor and vulnerable. In the absence of an effective exemption policy, user fees will impose a regressive tax burden on these groups and may well lead to reduced service utilisation by them. Yet despite the importance of exemption mechanisms, little is known about their design, organisation and feasibility within health systems (Gilson *et al.*, 1995).

The research reported here seeks to contribute to understanding of exemption mechanisms by assessment of Thailand's Low Income Card (LIC) Scheme. Through the LIC scheme, the poor can apply for identification cards which enable them and their families to obtain free care at public health facilities. Thailand is one of the few countries with any experience of implementing a national exemption policy and, at the time of this study, had nearly twenty years of experience from which to learn.

The research was conducted between September 1994 and August 1995, and draws on both previous evaluations and on a small-scale and in-depth study of experience in three purposively-selected communities. As the research was conducted at the time of the 1994/95 LIC card allocation round, data on the effectiveness of the scheme (i.e. accuracy in reaching the poor) were drawn only from evaluations of the LIC from the time of its inception to the early 1990s. The community-based studies provide detailed insights about the factors influencing effectiveness drawn from consideration of both the 1994/95 and 1990 card allocation rounds.

Evaluation of the LIC also has significance for current heath policy debates within Thailand. The range of existing health financing and benefit schemes targeted at low-income groups are under considerable scrutiny, as policy-makers consider options to expand population coverage. There is concern that exemptions are not reaching their target group because of weaknesses in policy organisation and implementation, such as procedures for identifying the poor and allocating benefit cards. There is also concern that the budget resources used to finance exemptions are not spent efficiently or equitably.

In the light of these international and national concerns, the ***overall goal*** of the research was:

> To contribute to health care financing policy development by in-depth analysis of the Low Income Card (LIC) scheme, the processes of its implementation and its success in protecting and benefiting low-income groups.

Its ***specific objectives*** were:

1. To review the development and implementation of the LIC scheme, and to analyse existing research on the LIC policy and its effectiveness;

2. To describe the process of card allocation and the factors influencing this process;

3. To examine how this process influences coverage of those unable to pay and leakages to those able to pay;

4. To assess the factors influencing the use or non-use of cards in obtaining health care;

5. To compare patient perceptions and use of the Low Income Card with alternative health care financing options available to low-income groups;

6. To feed the study findings into national and international policy discussions.

The research and its findings are presented in four parts. In Part I, the international and national policy context is presented, both to place the Low Income Card scheme in its national and policy context and to identify its possible lessons for Thailand and elsewhere. The methods used in the study are then described. Part II presents findings from a review of existing policy documents and evaluations on the LIC Scheme, and from interviews about the LIC with Thai policy-makers. The policy's development since 1975 and information on its changing effectiveness raise several unanswered questions. Most importantly it is clear that past evaluations, which have focused only on quantitative/output indicators of effectiveness, have not examined the factors influencing the Scheme's effectiveness. The community-based field research aimed to fill these gaps in knowledge. Part III presents the findings of this research, which explored card allocation procedures in the community and household take-up and use of the card using qualitative methods. Finally, Part IV presents the study's overall conclusions and recommendations.

2. THE INTERNATIONAL POLICY CONTEXT

In the face of resource constraints and a changing understanding of the role of government many countries have introduced or increased health care fees over the last fifteen to twenty years. Although there is conflicting evidence, there has been growing concern about the potential impact of fees on equity (Gilson, 1997). The common response to these concerns has been to suggest that exemption mechanisms provide an effective means of protecting the poor and, so, equity, whilst allowing fees to generate much needed revenue (Griffin, 1992; World Bank, 1987). However, few governments that have introduced user fees have given much thought to the design or implementation of exemptions for the poor (Nolan and Turbat, 1993; Russell and Gilson, 1995). Indeed, there is limited evidence about exemption policy effectiveness and few lessons about the factors which determine effectiveness. The information available suggests that policies to identify and reach the poor often miss their target, and are hindered by informational, administrative, economic, socio-cultural and political constraints (Table 1).

Table 1: Constraints to the effective implementation of health exemption policies

SETTING	CONSTRAINTS TO EFFECTIVE TARGETING
Information-scarce environments	• Household or individual income is difficult to assess, particularly in developing countries where salary or tax records are lacking, and where incomes may be erratic, seasonal or in-kind • The target group may lack information about their eligibility.
Weak administration	• Lack of procedural guidance or support to exemption administrators within facilities • Staff responsible for exemptions are untrained and face time constraints • Failure to monitor and adjust exemption practice where necessary • Lack of co-ordination between agencies responsible for exemption implementation
Economic constraints and incentives	• Inadequate budget resources allocated to finance exemptions • Staff reluctant to grant exemptions because undermines revenue generated
Socio-cultural and political constraints	• More privileged groups made eligible for exemptions • Social and political pressure on those issuing exemptions to accept bribes or waive fees for kin and friends • The poor's reluctance to accept exemptions due to stigma and invasive bureaucratic procedures • Lack of accountability to the poor of health committees or other decision-makers responsible for exemption design and implementation
	Source: Gilson *et al.*, 1995; Russell and Gilson, 1995; 1997

Given these constraints to exemption policy implementation, there is a need for research which can inform policy development:

> *"There is clearly an urgent need for more investigation of the feasibility and operation of nation-wide exemption schemes in low income countries before fee systems are put in place, in order to ensure that those already badly off are not made worse off" (Mills 1991: 1248).*

Thailand is one of the few countries with experience in implementing a nation-wide health sector exemption policy for the poor. The LIC scheme, first introduced in 1975, was thus identified as a possible source of policy lessons for other countries seeking to develop exemption policies. The research presented in this report both provides evidence of the scheme's effectiveness and considers the factors influencing that effectiveness. It particularly aims to improve understanding of the factors which facilitate or hinder the poor's access to targeted exemptions, and so to generate relevant policy lessons.

3. THE NATIONAL POLICY CONTEXT

A wide range of insurance or benefit schemes are available to different population groups in Thailand. Section 3.1 outlines these schemes, to place the LIC in the broader policy context and to highlight the fact that certain sections of the population are currently not covered by any insurance or benefit scheme. Section 3.2 then summarises Thailand's different exemption schemes (for the poor, elderly, children etc.) all of which, with the LIC scheme, are part of Thailand's Medical Welfare Scheme for poor and vulnerable groups. Finally, section 3.3 highlights the relevance of this study to health care financing debates within Thailand.

3.1 Health financing schemes and population coverage

Much health care purchased at government or private facilities in Thailand is financed through private out-of-pocket payments. In 1992 it was estimated that household expenditure made up 73.7% of all national health expenditures, with government bearing the remaining 26.1% of expenditures (Hsiao, 1993). Whilst estimates for 1994 indicate considerably higher levels of government spending (44.7% of total expenditures), they continue to illustrate the importance of household expenditures, comprising 49.4% of the total (Tangcharoensathien *et al.*, 1997).

The size of private, out-of-pocket financing has considerable implications for equity, as it is likely to imply financial barriers to access for groups within the population, particularly the poor. There are, however, a range of government financed or co-financed benefit schemes currently in operation in Thailand which offer insurance or exemption to different population groups to offset these barriers. Details of each scheme are briefly described and compared in Table 2.

Estimates of the proportion of the population not covered by any benefit scheme vary from 44.4% (Tangcharoensathien and Supachutikul, 1992) to 47.3% in 1992 (Hsiao, 1993) and 47.6% in a 1993 household survey in a large urban area (Pannarunothai and Mills, 1997). Figures since then suggest that benefit coverage has increased, with estimates of non-coverage declining to 31.2% for 1994 (Nittayarumphong, 1995), 32.2% for 1995 (Supachutikul, 1996) and 31.7% in 1996[7]. Table 2 draws on these higher coverage estimates.

However, the poor are likely to be disproportionately unprotected. The 1993 survey in a large urban area found that 67.4% of households in the poorest quintile were not covered by any benefit scheme, 19.8% more than the average level of under-coverage reported in this survey (Pannarunothai and Mills, 1997). Disadvantaged groups are likely to remain unprotected because the Civil Service Medical Benefit Scheme, Workmen's Compensation fund and Social Security programmes do not benefit the poor or informally employed. At the same time, voluntary health insurance is undeveloped in many districts and it remains unclear what proportion of rural and urban households can afford the premium of 500 Baht per year. Finally, not all poor households have access to free care (RHD/Mahidol, 1988).

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[7] Information drawn from a 1996 cluster survey and provided by the Health Systems Research Institute, Thailand.

Table 2: Health Insurance and Medical Welfare Programme Characteristics in Thailand, 1994 (population 58.5 million)

	Nature of scheme	Payment mechanism	Financing	Choice of provider	Population groups covered	Population coverage: million people	% of total population covered
Civil Servant Medical Benefit Scheme	fringe benefit for public employees	reimbursement of fees paid	general tax; copayment at private hospitals	OP must be public, IP can be public or private	Government officials and dependants	6.5	11.1%
Social Security	compulsory social insurance	700 Baht capitation payment	tripartite: employer, employee and government contribute 1.5% of payroll	public or registered private provider (> 100 beds)	workers in firms with more than 20 employees	5.0	8.5%
Workmen Compensation	compulsory employer liability scheme	reimbursement of fees paid (ceiling of B30,000)	employer pays 0.2-2% of payroll; copayment above B30,000	free choice	workers in firms with more than 20 employees	2.5	4.2%
Medical Welfare (Free Care) Programme	social welfare	free care at point of delivery	general tax - global low income budget	designated public provider with strict referral	poor elderly children <12 disabled veterans	11.7 3.7 5.5 0.9 0.2	20.0 6.3 9.4 1.5 0.3
Voluntary Health Insurance Card	voluntary pre-payment insurance	free care at point of delivery	household pays B500, government pays B500	designated public provider with strict referral	largely rural households	5.0	8.5
					Total Population Coverage	41.0	69.8

Source: Hsiao, 1993; Nittayarumphong, 1995

The following groups are most likely to be unprotected by any of the programmes listed in Table 2, and will therefore face the greatest financial barriers to obtaining health care:

- informal sector workers, and workers in small firms not covered by the Social Security Act 1991;
- the 'near poor', i.e. poor households not entitled to a Low Income Card because their income is marginally or temporarily above the income threshold;
- poor households entitled to a Low Income Card but which have not received a card, or choose not to use it;
- poor migrants who may not have easy access to Low Income Cards because they are temporary residents, or because the cards they possess can only be used in the sub-district where they were allocated;
- marginal or mobile groups especially difficult to target such as prostitutes, the homeless, beggars.

Expanding benefit coverage to these groups is therefore a key concern of policy-makers.

3.2 The Medical Welfare (Free Medical Care) Scheme

The Low Income Card scheme is one element of Thailand's Medical Welfare Scheme, which supports the provision of free medical care to the range of groups outlined in Table 3.

The only available data that provide evidence of the relative magnitude of these different groups is data on their utilisation of health care facilities. Data from 1996 clearly indicate that children under 12 and the elderly are the greatest health care users amongst these groups. They captured, respectively, 35.8% and 21.4% of the total outpatient visits among those protected by the medical welfare scheme, and 21.4% and 26.0% of all in-patient days (HSRI, 1998). However, focusing only on the three categories of cardholders, data from 1992 point to the particular importance of Type B cards as a protection for health care users as they captured 48% of all outpatient visits among these groups and 69% of all in-patient days (compared to utilisation levels of 38% and 22%, respectively, for Type A cardholders: see Table 12). Data from 1996 suggest that the level of utilisation of Type A users increased over time (to 48.1% of all outpatient visits and 37.9% of all in-patient days) but that the Type B card remained an important protection for health care users (used in 38.1% of all outpatient visits and 47.0% of all inpatient days: Ministry of Public Health, Health Insurance Office).

The Medical Welfare Scheme is financed through general taxation and the Medical Welfare Budget is used by MOPH hospitals and health centres to cover the cost of drugs, other medical supplies and food provided to the six groups highlighted in Table 3[8].

In 1994/95 the Medical Welfare Budget (MWB) was allocated from the centre to:

- providers under the Office of the Permanent Secretary of the Ministry of Public Health;
- providers under other Departments in the MOPH (e.g. Department of Mental Health), and providers under different ministries (e.g. Ministries of Interior, Defence);
- a contingency fund for emergencies and special programmes, held at the centre.

[8] The budget cannot be used to fund other inputs, such as staff.

Table 3: Categories of patient eligible for free care at government facilities

Category	Main benefits
Type A patients: The poor who show a low income health card which is obtained through community-based screening	Free OP and IP care at designated (nearest) government facilities, and higher levels if referred.
Type B patients: The poor who do not show a low income health card, but who are interviewed by a health worker and granted an exemption	Free OP and IP care at government facilities.
Type C patients: (i) veterans; monks; village health volunteers; tambon health workers[a]; tambon kamnan[a]; village head[a]; deputy village head; attack victims	Free OP and IP care at government facilities.
(ii) elected members of national, provincial and municipal assemblies	Have to pay for care, but 50% fee reduction in private rooms at government hospitals.
Elderly > 60 years[b]	Free OP and IP care at designated government facilities, and higher levels if referred.
Children < 12 years	Free OP and IP care at designated government facilities, and higher levels if referred.
Disabled	Free OP and IP care.

Notes:

(a) Following pressure from these government officers/community leaders, these relatively privileged groups became entitled to fully subsidised voluntary health insurance in 1993/4. The term *Tambon* refers to the sub-district administrative level. There is normally a health centre with at least one health worker in each Tambon. The *Kamnan* is a sub-district leader, head of the Tambon council. (b) Free care for the elderly was introduced in 1992

The distribution of the MWB between different service levels, MOPH Departments and other Ministries, for 1994 and 1995 is summarised in Table 4. A large proportion of the Medical Welfare Budget (nearly 90%) was allocated to providers under the Office of the Permanent Secretary of the Ministry of Public Health (MOPH regional and provincial hospitals, district/community hospitals, sub-district (Tambon) health centres, clinics and specialist hospitals). This portion of the budget was then distributed between Thailand's 75 provinces on the following bases:

- 45% based on its previous 'free care' workload (across all eligible categories);
- 20% based on the number of LIC holders;
- 20% based on the total population;
- 10% based on the proportion of health facilities;
- 5% based on the health problems of the area (particularly for preventive and promotive activities).

Within each province the Medical Welfare Budget was distributed between two main administrative levels: the province, where the budget was used primarily to finance free care at the provincial hospital; and the districts. Before the 1994/5 financial year each province had some degree of discretion over how it distributed the budget between service levels. The districts (i.e. district hospitals and health centres) tended to have greater bargaining power in this distributive process, receiving over 50% of the provincial budget. However, in 1994/95 the central Bureau of the Budget set a centralised distributive formula for all provinces in order to increase the

proportion of the provincial medical welfare budget going to the provincial hospital (from about 40% to 45-50%), and reduce the proportion going to the districts.

Table 4: Medical Welfare (Free Medical Care) budget allocation: the broad pattern, 1994-5

	Million Baht		% Total Budget	
Resources allocated to:	1994	1995	1994	1995
Provinces: Providers under the Office of the Permanent Secretary for Health	3687.2	3730.63	89.8	87.3
Centre: Providers under other Departments in the MOPH	256.45	331.57	6.2	7.8
Providers under other Ministries	163.85	210.9	4.0	4.9
Total[a]	4107.5	4273.1	100	100

Note: (a) excludes contingency funds
Source: Ministry of Public Health, Health Insurance Office 1997

3.3 Relevance of this study to Thai policy development

In Thailand, existing health insurance or exemption schemes which are targeted at low-income groups are under considerable scrutiny, as policy-makers consider the most cost-effective options to expand benefit coverage to unprotected groups. There are currently three schemes which could be developed or changed, possibly in combination, to expand coverage of poor and vulnerable groups: the Low Income Card exemption scheme (Type A channel); the Type B subsidy/exemption channel; and voluntary health insurance.

This study focuses on the LIC scheme (Type A: Table 3), but recognises that research on the LIC scheme must also consider the Type B channel, since it is an alternative policy option for patients and policy-makers which may influence patient incentives to apply for and use an LIC.

Previous evaluations of the LIC scheme have assessed effectiveness by using policy *output* indicators: the proportion of the target population covered by the scheme (the coverage rate) and the proportion of cardholders who are not eligible (the leakage rate). These evaluations are reviewed and summarised in Part II of this report.

However, to date, few evaluations have examined in detail the factors influencing policy effectiveness, such as the organisation and implementation of the scheme, and the demand-side factors which may influence take-up and use of the card. Key concerns raised during interviews with policy-makers, or identified from past evaluations, were:

Leakage of benefits: given that a large proportion (approximately 20%) of people receiving an LIC are 'non-poor' (RHD/Mahidol, 1988), do card allocation processes in the community contribute to this leakage to non-eligible groups? Whilst policy-makers suggest that the community-based screening procedures used by the LIC scheme are less open to abuse than the facility-based procedures of the Type B option, hospital managers have more confidence in the latter (personal communication, A. Supachutikul).

Undercoverage: what factors influence whether or not those who are eligible, the poorest or most marginal groups in society, receive a card? Previous evaluations suggest that they may not, for example, know about the policy or may not have access to the application procedure
Use of the card's benefits: why do some cardholders not use the card? Previous evaluations suggest that some resort to self care or prefer private providers (Pannarunothai and Mills,

1997); and/or that some choose to pay or have to pay at hospitals because they by-pass the health centre.

Understanding what factors influence policy effectiveness, most particularly what factors prevent further increases in coverage or decreases in leakage, is of critical importance to policy-makers as it informs the policy actions necessary to improve effectiveness. These factors can be conceptualised as processes, since they relate to implementation procedures and household responses, and were the primary focus of the community-based research presented in Part III of this report.

4. RESEARCH APPROACH AND METHODS

4.1 Overall research approach

The overall approach of this study is that policy development must be informed by in-depth understanding of the processes of policy development and implementation rather than only the consequences (outputs or impacts) of these processes. Whilst the study seeks to understand the effectiveness of the LIC, its core focus is to identify the factors that facilitate or constrain the implementation of the policy and so, its effectiveness. It, therefore, includes two inter-locking components:

- a national level study combining a review of available data on the effectiveness of the LIC scheme and an overview of the broad policy context and evolution of the LIC scheme, undertaken through analysis of documents and interviews of key informants (primarily addressing objective 1);
- an in-depth assessment of the factors influencing the take-up of the LIC and its use in accessing health care through local level studies (addressing objectives 2-5).

The 'effectiveness' of the LIC can be judged as rooted in the extent both of 'under-coverage'and of 'leakage' (Gilson *et al.* 1995; Willis and Leighton 1995). Under-coverage occurs when those meeting the established criteria of 'poor' do not receive protection from payment through the exemption mechanism, and 'leakage' occurs when those who are non-poor receive protection from payment through the exemption.

4.2 Local level studies

Nature of studies

The local level studies were case studies of particular communities' experiences, and were conducted using a range of qualitative data collection methods including:

- in-depth interviews with key informants;
- focus group discussions;
- participatory rural appraisal techniques such as wealth ranking and social mapping;
- observational studies of the card allocation process.

Qualitative methods were applied within a case study design because these local level studies explicitly sought to develop detailed insights into the experiences and perceptions of different groups concerning the LIC. Rather than producing generalisable data on specific aspects of experience or perspectives, the study sought to understand the complexity of these experiences and perceptions, and so gain more detailed understanding of the factors facilitating or constraining the effectiveness of the LIC. Qualitative methods are particularly appropriate within such an approach as they allow detailed probing on questions concerning how and why things happen.

Site selection

All sites were selected purposively. An average income province was first selected and then, within it, one low income rural district and within that, two Tambons (one of average income and one of low income). In each Tambon one village in which a health centre was located was then selected. In addition an urban low income community from the provincial capital was selected. The selection of relatively low income communities within a province of average income status was designed to allow the circumstances and needs of those likely to be poor by national standards (but not among the core poorest) to be determined, whilst the inclusion of two rural communities and one urban community allowed the different card allocation processes applied in these different areas to be reviewed.

Full details of the sites and the definitions of different socio-economic groups applied within each of them (in relation to the selection of respondents) are outlined in Annex 1.

Selection of respondents

Key informants for this study comprised both government officials responsible for the LIC at provincial, district, Tambon, municipal and village levels, as well as community leaders within the three selected communities (such as village headmen, village committee members and local health volunteers) and community members.

Whilst government and local level officials were purposively selected on the basis of their positions, community members were selected for interview on the basis of their income level and card-holding status. All community members were first stratified through wealth ranking procedures, into low, middle and high income groups and then those in each stratum were divided into those holding cards and those not holding cards. As the 1994/95 card allocation process was still being finalised, card holding status from the 1990 round was used in this stratification. As no high income cardholders were identified, five distinct groups were determined across all communities:

1. high income/no card
2. middle income/card holding
3. middle income/no card
4. low income/card holding
5. low income/no card.

Finally, from each group a sample of respondents was drawn based on their being long-term residents of the area, and so having retrospective knowledge of LIC implementation practices, and allowing for the inclusion of those middle income non-cardholders who had applied but been refused a card.

Although it was intended that in each community there would be one focus group discussion and one key informant interview with each of the five respondent groups, some groups were too small in size to allow a group discussion to be held. Instead more in-depth interviews were conducted.

Overall, a total of 32 in-depth interviews and 6 focus group discussions were held across all communities (Table 5). On average, focus group discussions had 6 to 7 participants.

Table 5: Details of respondents in local level studies

Respondent group	COM1 (rural, low income)		COM2 (rural, average income)		COM3 (urban, low income)	
	Focus group	Interview	Focus group	Interview	Focus group	Interview
key officials	1	3	1	3	1	1
high income, no card		1		1		1
middle income, card holding		5		4		1
middle income, no card		1		1		1
low income, card holding	1	1	1	1		1
low income, no card		5	1	1		1
Total	2	16	3	11	1	6

Data collection instruments

Two primary instruments were used in data collection: in-depth interview guides and focus group discussion guides. Separate guides were prepared for each sampled respondent group, pre-tested in a different province and then revised.

The main focus of in-depth interviews of villagers was health-seeking behaviour and of officials, the card allocation process. Focus group discussions collected background information about the communities as well as specific information about the card allocation process and factors influencing it, and health seeking behaviour.

Data collection

All data were collected in three phases, during the period of December 1994 to July 1995.

Phase 1: Baseline data collection and wealth ranking

Interviews with key officials at provincial, district, Tambon and municipal council levels were first conducted to gather background information about the card allocation process and the selected communities.

Social mapping and wealth ranking procedures were then carried out in each community. Around 5 long-term local residents in each community were chosen as key informants for this exercise, based on information given by local health workers and using the snow-ball technique to identify those commonly seen as being appropriate informants. These informants determined locally-accepted definitions of poverty and wealth, and then ranked each household in the community in relation to three categories: rich, medium income, and poor. Information from the district health office was then used to identify cardholders among each wealth group.

Phase 2: Observational studies of the card allocation process

Although it had been intended to observe the process of card allocation at community level during the study, this 1994/95 process had been completed prior to community visits. Instead, the researchers observed the process in a different province in order to gain insight into it.

Phase 3: Field data collection

As discussed, data collection was largely undertaken through focus group discussions and in-depth interviews of village leaders and sampled villagers.

Data analysis

All interview data were first transcribed from tape recordings and then analysed according to appropriate categories. A process of triangulation was used to ensure the validity of findings.

4.3 The strengths and weaknesses of the local level studies

By allowing a detailed review of card allocation processes and perceptions from different groups' perspectives, the qualitative methods used in these studies give considerable insight into the LIC scheme and generate greater insight than more extensive survey methods. They were also appropriate in that they allowed sensitive issues, such as perceptions of the LIC and health seeking behaviour, to be probed. Finally, the use of wealth ranking methods highlighted the problems of using standard income definitions in determining poverty levels. An income threshold level by itself does not pick up all the factors associated with poverty in the understanding of those living in poor, rural and urban communities.

At the same time, a number of problems with these methods were identified:

- villagers had some difficulty recalling the 1990 card allocation process and distinguishing between that and the recent, 1994/95 process;
- it was impossible to observe directly the 1994/95 card allocation processes in the communities studied;
- high levels of migration out of the poor, urban community meant that few remaining residents had substantial knowledge of the 1990 card allocation process;
- similarly, all officials who had been involved in the 1990 card allocation process in this community had already been transferred, whilst the director of the municipal health office had only been appointed a few months before data collection and so was not well informed about the LIC: as a result, most data was collected from municipal health workers;
- the two rural communities were purposively selected because health centres were located in them, reducing the problem of geographic accessibility for most of those interviewed.

Perhaps most importantly, these local level studies clearly reflect the particular experience of only three communities and so great care must be taken in generalising from them. They allow aspects of these communities' experience to be identified and so may point to important positive and negative experiences, but additional work is necessary to determine if the findings from these areas are common to other settings.

PART II

5. THE EVOLUTION OF THE LOW INCOME CARD SCHEME

In this section we answer two broad questions:
- how did the design of the LIC change over time?
- what factors appear to have contributed to the design changes?

User fees have always been charged at government health facilities in Thailand. Before the 1970s it was normal procedure for doctors or other health workers to charge a lower fee or grant exemptions to low-income groups to reduce barriers to access, but this was unofficial and on an *ad hoc* basis. The Free Medical Care Scheme was initiated in 1975/6 in order to regularise the process of protecting the poor, and the first allocation of Low Income Cards occurred in 1981. The regulations and procedures of the LIC have been subject to four revisions, one at each of the subsequent times of card allocation: 1984, 1987, 1990 and 1994/5.

5.1 Getting started, 1976-81

In the early 1970s growing opposition to military rule by student groups, labour unions and peasant movements culminated in the social uprising of 1973 and the overthrow of the military regime. A civilian government appointed by the King steered the country towards elections in 1975, and the Social Action Party, which had thrust socio-economic inequities and welfare issues to the forefront of Thailand's policy agenda, won enough seats at that election to form a coalition government led by Kukurit Pramot.

A package of welfare measures was introduced by the Social Action Party as part of the Fourth Five Year National Development Plan (1977-81), including free bus fares in Bangkok, job creation in rural areas and guaranteed prices for rice. Free health care for the poor formed part of the new government's proposals, with the objectives to promote more equitable access to health services, and to improve the health status of the poor, especially in rural areas (Chadchai Tansiriratanakul, 1978; referenced in Mills, 1991).

A sub-committee headed by the Deputy Permanent Secretary of the MOPH was set up to consider the poverty criteria which could be used to define the target group for the Free Medical Care Scheme (Mongkolsmai, 1993a). In 1976 the MOPH set an income threshold of 1000 Baht per capita per month to define patients eligible for free care - a much higher poverty threshold than the newly-established rural or urban monthly poverty lines (165/247 Baht[9]: Socio-Economic Survey, National Statistics Office). Interviews with policy-makers involved with the scheme in its early phases revealed two explanations for these generous poverty criteria: MOPH policy-makers were either not aware of or did not have access to the new poverty data, and the higher threshold was more politically acceptable.

These interviews also revealed that government capacity to implement the system of identification cards in 1976 was limited as there had been little preparation for policy implementation (see also Mongkolsmai, 1993a). The staff, information and administrative systems needed to screen patients effectively were not available in the MOPH at that time, and the other Ministry with related responsibilities - the Department of Social Welfare - also lacked the capacity to administer means tests.

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9 Based on a food consumption basket required for minimum calorie intake plus some non-food expenditures.

As a result, the previous practices for exempting the poor did not change considerably immediately after 1976: patients claiming inability to pay still had to be interviewed by the doctor or health worker in charge of the facility. Exemptions continued to be granted inconsistently across facilities and provinces, according to the subjective judgement of health personnel (Mills, 1991) and leading to benefit leakage.

5.2 The introduction and development of the Low Income Card scheme, 1981

By 1981, however, the government had developed clear policy guidelines which introduced new eligibility criteria, identification cards and community screening procedures (RHD/MOPH, 1981). People with the following age, occupational or health characteristics were eligible for exemption: children under 5 years old; elderly over 60 years old; landless labourers; subsistence farmers; the homeless; and people with mental or physical disabilities.

The policy regulations of 1981 established three main design features:

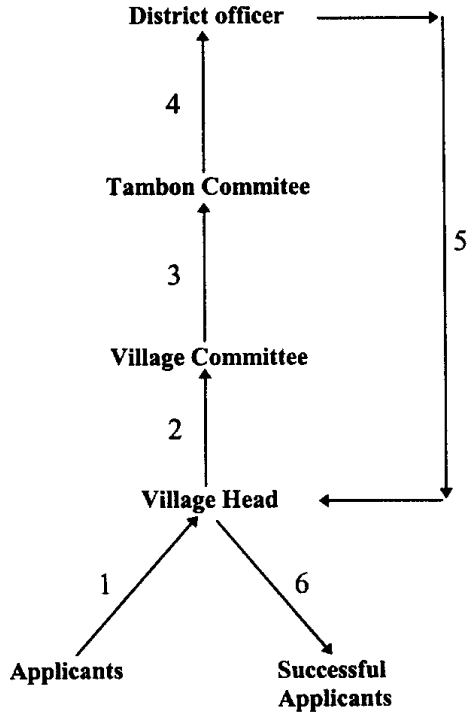
Specification of the target group: Single people with a monthly income of less than 1500 Baht; married couples whose total income was less than 2000 Baht per month, and their children under 20 (the basis of these threshold levels is unclear).

Identification cards: Members of a poor household could now gain access to free health care by applying for and obtaining a Low Income Card. The introduction of the card meant that the poor could claim exemptions through two separate channels: using the Low Income Card (Type A patients) or through the old system requiring an interview with facility staff (Type B patients). New cards were to be allocated every three years.

Community-based screening to determine eligibility for a card: Peoples' eligibility for a card was to be assessed in the community, primarily by village and Tambon leaders. Since the MOPH lacked the village level administrative capacity to assess card applicants' income (only health volunteers operated at the village level), the Ministry of Interior (MoI), which already had an administrative network at the village and sub-district levels, was given responsibility for implementing the card allocation process. The key actors in this process at the village level would be the village head, employed by the MoI and the village committee, and at the sub-district (Tambon) level, the Tambon committee and the sub-district's chief official, the Kamnan, also employed by the MoI. The MOPH administrative structure extends to the Tambon but the health worker who runs the Tambon health centre (the first tier of the government health service) was not, at that time, a member of the Tambon committee.

The official procedures for card applications, screening and distribution established by the regulations for rural areas are summarised in Figure 1. In urban areas, where different administrative structures exist, the procedures were slightly different: an applicant, with the help of a local health worker, had to submit their application to the relevant municipal authority, and a municipal committee made up of local government and health officials would make the decision.

Figure 1: Official procedures for screening the poor: actors and decision-making structures, 1981



Notes

1. Villagers complete application forms, which show all household earnings, and these are returned to the village head.
2. The village head, in consultation with the village committee, selects and lists those he believes are eligible for a Low Income Card.
3. The list is debated, and amended where relevant at the sub-district (Tambon) committee.
4. The Kamnan sends the list to the District Office, where the cards are produced and stamped.
5. The cards are then sent back to each village head
6. The village head distributes the cards to the successful applicants

Source: RHD/MOPH, 1981.

5.3 Strengthening community screening procedures, 1984-1997

Table 6 summarises the original policy content of the Low Income Card scheme, and the key changes to the scheme's content between 1981 and 1994. Despite the clarification of policy design and organisation in the 1981 regulations, by 1984 MOPH evaluations of the scheme began to reveal problems with community screening procedures (Chaiwonkial, 1982; Mills, 1991; other reports referenced in Oumkrua, 1989).

Table 6: Summary of Low Income Card policy development, 1981-1994.

Date	Key changes to Low Income Card policy content	
	Eligibility criteria (Baht per month)	Organisation
1976-81	Income criteria: 1000 Baht per capita per month	• No ID cards: the decision to provide free care was at the discretion of health staff
1981	Income criteria: Individual 1500 Baht Household 2000 Baht	• ID cards for the target group • Community-based screening by village and Tambon leaders/committees
1984	-	• Village committee's composition strengthened • Health volunteer to ensure that village committee are informed about the scheme • Marriage regulations relaxed
1987	-	• Inclusion of health worker in decision-making process • Tambon committee's composition strengthened
1990	-	• Greater information dissemination about the scheme to villagers • A more proactive role for village heads in the application procedure • Interview process made quicker and more accessible
1994	Income criteria: Individual 2000 Baht Household 2800 Baht	• Improved access for migrants • Right of appeal

The 1984 Regulations

Review of Table 6 suggests that the purpose of the regulation changes in 1984 was to address three of the design or implementation problems identified by evaluations between 1981 and 1984 (Chaiwonkial, 1982; Oumkrua, 1989):

- the previous regulations specified that only married couples were eligible for a card: these regulations were relaxed, allowing households with unmarried couples to apply for a card;

- an evaluation in 1982 argued that the village committee had little say in the screening process, as the village head was likely to dominate procedures and decisions - although the evidence for this claim was unreported, it may have been based on anecdotal evidence or general knowledge about the power of the village head in village affairs: in response, the 1984 regulations attempted to strengthen the village committee's composition by making the village health volunteer and the local monk additional members of the committee;

- another factor identified as a cause of the village committee's poor performance was committee members' limited understanding of policy rules and procedures: again it was the health volunteer who was to play a strengthening role, ensuring that that village committee members were informed about their role in card allocation procedures.

According to research staff at the MOPH's Health Systems Research Institute (HSRI), the last two changes aimed to increase the knowledge and number of local actors involved in screening procedures, to improve judgements made about eligibility and to counter the predominant role of the village head. Through the three changes, the MOPH aimed to increase coverage of the poor within the village and reduce leakage to the ineligible.

However, the 1984 regulation changes did not respond to other weaknesses of the scheme. Neither the three year interval between application periods, which limited access to cards for those who had missed the application date[10], nor the fundamental and practical difficulty of measuring a household's income were addressed. It is unlikely, however, that the problem of income measurement could have been overcome through changes in policy content alone and it remains a critical constraint to the effective implementation of an exemption scheme in most developing countries.

Finally, there was also concern in 1982 that the income threshold level was set too high (Chaiwonkial, 1982; Oumkrua, 1989; Mongkolsmai, 1993a). As the average family size in this period was about 4 people, the MOPH criteria of 2000 Baht per month per household was equivalent to about 500 Baht per capita per month - almost twice as high as the 1981 official rural poverty line (288 Baht), although comparable to the urban poverty line (429 Baht). The threshold made over 50% of the Thai population eligible for a card, inevitably generating relatively high, and perhaps unsustainable, administration and management costs (Mills, 1991).

It is not clear why the MOPH regulations specified an eligibility threshold above the poverty line. Planners may have been unaware of the 1981 poverty data or, following 1976 practice, may have deliberately set the poverty threshold higher for other reasons such as concern that people above the minimal subsistence poverty line might still not be able to pay medical fees or the need to generate wider political support.

Interviews with researchers at the MOPH's Health Systems Research Institute (HSRI) suggest that the potential problem of widespread eligibility was, in practice, addressed informally. In each province the Provincial Chief Medical Officer would not allow more than 20% of the population to get a card, and 'most village heads knew their ceiling' (personal communication, A. Supachutikul, HSRI). Furthermore, by the late 1980s the MOPH poverty criteria and the official poverty line were converging since the MOPH criteria were not changed throughout the 1980s, while the poverty line has increased with inflation (by 1988/89 the urban poverty level was 527 Baht per month, with the rural level still only 345 Baht per month).

The 1987 Regulations

Although no additional problems were identified by research in the period 1984-7, interviews with policy-makers suggested that leakage and undercoverage were recognised as persistent problems and health workers and MOPH planners were critical of community screening procedures dominated by the MoI. This imbalance of power was considered a design weakness by health policy-makers, since health staff perceived the community screening procedures to be open to abuse by the village head who might allocate cards according to his own criteria or needs,

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[10] It is now possible for people to apply for a card at the District Office at any time. It is unclear when this extra flexibility was introduced to counter the problem of the 3 year application interval.

ignoring the MOPH criteria. MOPH policy-makers, in their annual top level meeting with the staff from the MoI[11], pushed for the inclusion of health staff in the card allocation process.

As a result, the screening regulations were changed again in 1987, and again the strategy appeared to be to increase the number of local actors involved in decision-making to improve judgements made about eligibility. Firstly, there was a re-iteration that the village committee should have a greater voice in card allocation relative to the village head. Secondly, the health worker responsible for the Tambon was given responsibility for checking the list of eligible candidates drawn up by each village in the Tambon, and for suggesting changes where s/he felt MOPH criteria had not been applied (e.g. to take people off the list). Thirdly, the Tambon committee was strengthened through the inclusion of a rural development worker and an agricultural officer, who would also know about people's income and eligibility.

The 1990 Regulations

The 1990 Regulations set out a policy strategy which aimed to improve coverage further, and were clearly a response to the continuing problems in card allocation (Mongkolsmai, 1993a; RHD/MOPH, 1990a; Supachutikul, 1996). The strategy involved (Table 6):

- greater information dissemination to villagers prior to the application date;
- a more proactive role for village heads in the application procedure: the village head was to announce the scheme one month before the deadline for applications, and was made responsible for conducting a house to house survey to ask people to complete their application forms, and to inform them of the day when they should attend an interview (RHD/MOPH, 1990a);
- the interview process was made quicker and more accessible by allowing the village health volunteer to assist the village head in conducting interviews.

The 1994/5 Regulations

Despite the improved effectiveness of the scheme, by 1994 a considerable proportion of the target group was still not covered (20-25% according to 1990 estimates). It was also clear to some within the MOPH that certain groups, notably more mobile urban workers and migrants, were difficult to reach within existing regulations as they could only use their Low Income Card in the designated facility close to where they made the application and not in the district where they were currently working.

In 1994/5, the key change to the LIC scheme regulations was the new income eligibility criteria of 2000/2800 Baht. This was the first change to the income criteria in nearly 15 years and clearly tackled the impact of inflation on the eligibility threshold. A second change improved access for migrants: people living outside their home areas were now able to go to the district or municipality health office directly or indirectly (through facility staff) to apply for a card. Finally, the new regulations also introduced the right of appeal for applicants. The impact of these changes on the 1994/5 card allocation is still not fully reported.

The 1997 Regulations

Two further changes were introduced in the 1997 card allocation round: the use of a 'social guide' technique to identify the poorest households in the community and the allocation of the card to individuals rather than households. However, as the field work for this study was conducted in 1994/95 neither of these changes is considered here.

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[11] Top officials from the MOPH and the MoI meet annually to discuss the Low Income Card policy and implementation regulations, and any possible changes to policy regulations.

Key findings concerning policy development:

- regulation changes in 1984 and 1987 aimed to address weaknesses in the village and Tambon committees, principally through greater involvement of health volunteers and health workers;
- regulation changes in 1990 aimed to address the reduced effectiveness of the scheme through information campaigns, a more proactive role for the village head, and an easier interview process, and appear to have succeeded;
- 1994/95 regulation changes largely sought to improve access to the LIC by raising the eligibility threshold level and introducing easier procedures through which migrants could access a card.

6. POLICY EFFECTIVENESS

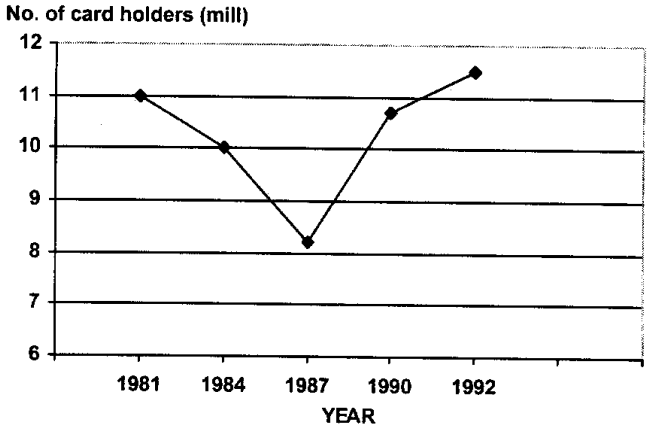
In this section we answer one main question:

- what does the available evidence suggest about the scheme's effectiveness, in terms of coverage of the target group and leakage to the non-eligible?

6.1 The number and regional distribution of cardholders

In the years following the initial allocation of cards in 1981, the number of cardholders[12] fell significantly until 1987 (Figure 2). But following various efforts in the early 1990s to increase card uptake, such as information campaigns, the number of cardholders then increased and by 1992 20% of the population were covered by the card's benefits (11.5 million people). Although reliable coverage data for later periods are not available, there are some indications that coverage may have subsequently fallen below this level.

Figure 2: Total number of Low Income Card holders, 1981-92



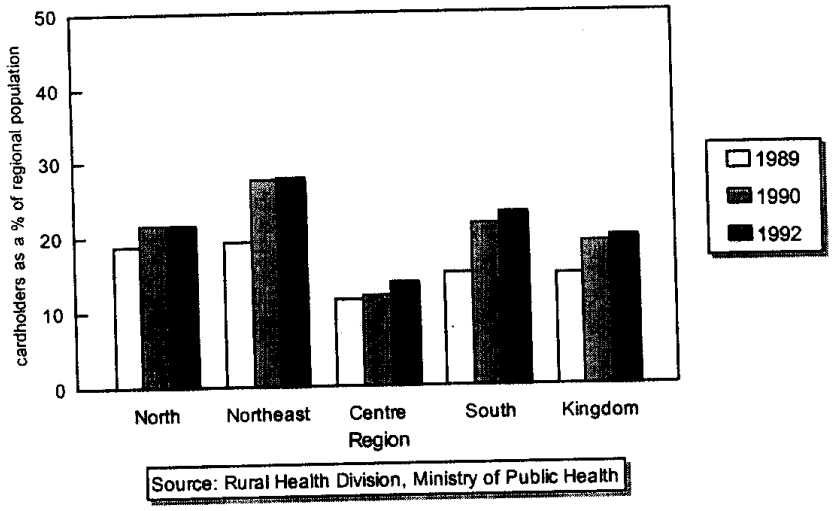
Source:Rural Health Division, Ministry of Public Health

Analysis of the regional distribution of cardholders is a further means of assessing the effectiveness of the protection afforded by the Low Income Card, given the considerable differences in income levels between regions. The Northeastern Region is the poorest region in the country, with per capita incomes averaging only 38% of the national average in 1998 and 35% in 1995 (Annex 2). In 1988 33% of the region's population lived below the poverty line, the highest poverty incidence of all regions, and the province accounted for 54% of poverty nation-wide in 1988 and 59% in 1996 (Annex 2). Not surprisingly, therefore, 65% of the national increase in cardholder numbers between 1989 and 1990 occurred in the Northeast region[13].

12 The number of cardholders refers to the number of people who have access to the card's benefits. As one card is normally allocated to one household/family, the number of cardholders is several times higher than the number of cards actually allocated.

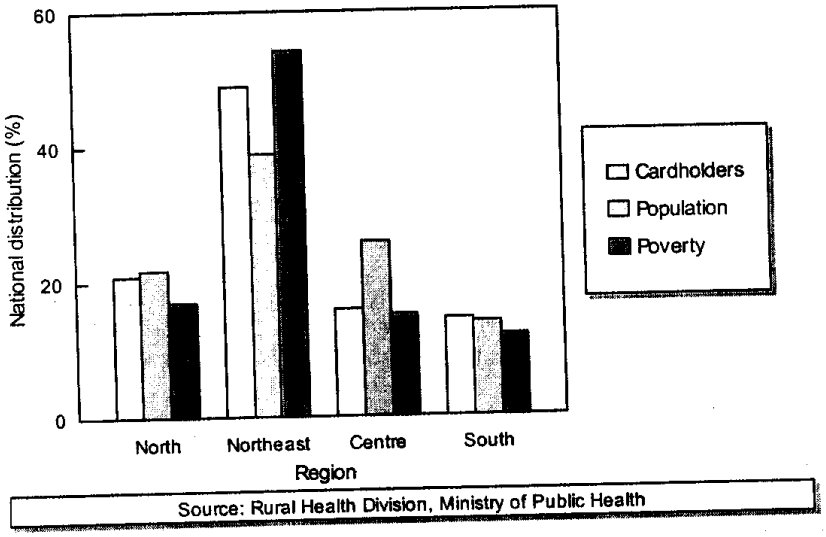
13 The Northeast gained an additional 1.6 million of the 2.5 million new cardholders reached by the 1990 card allocation process.

Figure 3: Proportion of population covered by LIC, 1989-92



By 1992, 28% of the poor Northeast's population was covered by a Low Income Card (5.6 million cardholders), a higher proportion than the other regions and higher than the national population coverage figure of 20% (Figure 3). Thus by 1992 the Northeast contained a relatively high proportion of the country's cardholders (49%) compared to its share of population (39%: Figure 4). Nonetheless, the Northeast's share of the country's cardholders (49%) remained disproportionately low compared to its share of the country's poor (54%), in contrast to the Central region, which includes Bangkok, whose share of cardholders exceeded its share of the poor population (compare white and black bars of Figure 4).

Figure 4: Regional distribution of cardholders compared with regional distributions of population and poverty, 1992



Overall, these trends indicate that there were increases in LIC coverage levels in the early 1990s. However, there also were regional inequities in the distribution of cardholders around the country and the data for the Northeast region suggest that there may be under-coverage of the target group. Further analysis of the LIC scheme's *effectiveness* requires assessment of the proportion of the eligible target group covered by the scheme (coverage), and the proportion of cardholders who are not actually eligible (leakage).

6.2 Coverage of the eligible

The Ministry of Public (MOPH) target group from the time of the LIC's inception to 1994 was individuals/households with incomes below 1500/2000 Baht. Two evaluations suggest that the LIC scheme's coverage of this group was extremely low following the 1987 card allocation, at around 28% nationally. One evaluation drew on routinely collected information (MOPH data, Figure 5) and one on a household survey of 14,400 households in 36 provinces (RHD/Mahidol, 1988).

However, using socio-economic survey data to estimate the number of households in each region with incomes below 2000 Baht, Supachutikul (1996) estimated that 41.1% of the MOPH target group was covered nationally in 1987 and 43.4% in the Northeast, and that after the 1990 allocation, coverage of this group rose to 76.2% nationally and 84% in the Northeast (Table 7). At the same time, coverage in Bangkok fell below the very low level of 1987. The difference between Supachutikul's estimates and those of the earlier studies reflects the fact that the size of the target group used in the calculations declined considerably between 1987 and 1990 (from 35% of the population to 25%) as the income level for eligibility remained at 2000 Baht while inflation had lifted many households above this threshold by 1990. Although this false 'shrinkage' in the target group may have misleadingly raised coverage figures, the number of cardholders did increase from 7.6 million in 1987 to 10.7 million in 1990.

At the same time, Mongkolsmai's (1993a) estimates lend support to Supachutikul's figures. Although she determined the target group as the number of people living below the national poverty line rather than those falling below the MOPH poverty threshold level, the poverty line and the MOPH criteria were very similar by the late 1980s (Supachutikul, 1996). From that time coverage estimates using the poverty line criteria can, therefore, be used as proxy indicators of coverage of the MOPH target group[14]. Mongkolsmai found that only 49.2% of the core poor were covered by a card in 1987, and in the Northeast only 42.3% of those below the poverty line were covered (Table 8). However, her evaluation again suggests that strategies to increase coverage of the target group at the 1990 allocation were successful. National coverage increased to 81% of those below the poverty line, and in the Northeast the proportion of those below the poverty line with cards rose dramatically from 42% in 1987 to 81% in 1990 (Table 8). Overall, improvements in coverage between 1987 and 1990 were most dramatic in the Northeast, North and South. Coverage did not improve dramatically in the Centre, possibly because it was already relatively high in 1987. Reflecting Supachutikul's (1996) findings, the number of cardholders in Bangkok actually fell from 30,000 in 1987 to 20,000 in 1990. The cause and implications of this decline are unclear.

Both Mongkolsmai and Supachutikul, therefore, suggest that coverage increased between 1987 and 1990, to 76.2% of the MOPH target group (Table 7) and 81% of those below the poverty line (Table 8)[15]. However, they also both indicate that about 20% of the poor were still not covered by

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14 In 1987 and 1990, the MOPH definition of a poor household was 2000 Baht per month, or 24,000 Baht per year. With an average household size of 3.9, the MOPH annual per capita income threshold was 6,154 Baht/person/year. By 1988/9 this figure was only 50% higher than the per capita poverty line for rural areas (4,141 Baht/person/year) and was less than the per capita poverty line for urban areas (6,324 Baht/person/year).

15 However, it should also be noted that between 1987 and 1990 the size of the target group in Supachutikul's calculations declined considerably (from 35% of the population to 25%) as the income

the scheme in 1990. Whilst the adaptations of the LIC strategy implemented in the 1980s and discussed in Section 5 appear, therefore, to have generated gains in effectiveness, a group of eligible poor remained uncovered.

Figure 5: Proportion of the MOPH target group with a Low Income Card, 1987

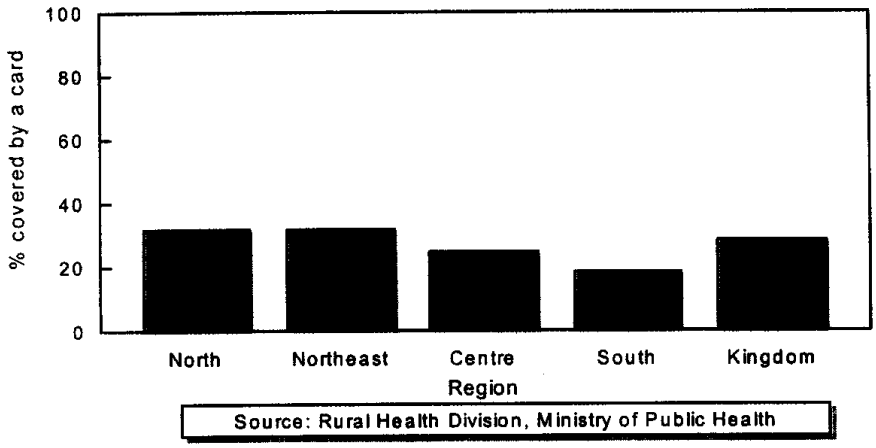


Table 7: Low Income Card scheme's coverage of the MOPH target group, 1987-1990 [a]

	Million persons covered by scheme		% of MOPH target group covered	
	1987	1990	1987	1990
North	1.8	2.4	45.7	77.0
North east	3.5	5.3	43.4	84.0
Central	1.3	1.5	39.7	70.8
South	1.0	1.5	38.8	80.5
Bangkok	0.0	0.0	6.5	6.0
Kingdom	7.6	10.7	41.1	76.2

Note:
[a] This table assumes that only the MOPH target group were allocated cards. Leakage to the non-poor would reduce coverage rates.

Source: Supachutikul, 1996.

level for eligibility remained at 2000 Baht while inflation had lifted many households above this threshold by 1990. Yet whilst this false 'shrinkage' in the target group may have misleadingly raised coverage figures, the number of cardholders did increase from 7.6 million in 1987 to 10.7 million in 1990.

Table 8: Low Income Card scheme's coverage of those below the poverty line, 1987-1990 [a]

	Million persons covered by scheme		% of those below the poverty line covered	
	1987	1990	1987	1990
North	1.8	2.4	73.7	100.8
North east	3.5	5.3	42.3	81.1
Central	1.3	1.5	72.6	75.7
South	1.0	1.5	45.6	84.7
Bangkok	0.0	0.0	14.3	8.7
Kingdom	7.6	10.7	49.2	81.0

Note:
[a] This table assumes that only the poor were allocated cards. Leakage to the non-poor would reduce coverage rates.

Source: Mongkolsmai, 1993a.

6.3 Leakage to the non-eligible

Only limited evidence on leakage of the LIC to the non-poor is available. Not surprisingly, it was clearly a problem even before identification cards were introduced. A 1980 Rural Health Division survey of 4269 free care patients in 512 facilities in 9 provinces found that 11.8% of hospital patients who received free care came from households with a monthly income above 2000 Baht, and that 8.8% of health centre users who received free care were categorised as 'non-poor' (RHD/MOPH, 1980)[16].

Two sources also point to leakage after the LIC was available. In the 1988 household survey 600 out of 3050 card-holding households (19.5%) were classified as non-poor/ineligible (RHD/Mahidol, 1988). A GTZ study in the same year also found evidence of leakage (GTZ, 1988). It identified mismanagement and abuse in the distribution of free medical cards, and quotes one source (Adeyi, 1988) as stating that only 60% of LIC holders were poor, whereas 17% were wealthy.

6.4 Expenditure patterns as a proxy indicator of effectiveness

A proxy indicator of the Low Income Card scheme's effectiveness is the level of health care expenditure incurred by the poor, since the card should protect this group from the burden of fees. Two studies highlight the regressive nature of health care expenditure patterns in Thailand in which the poor, including LIC holders, spend a higher proportion of their income on health care than higher income groups.

16 Some of the higher income households in this group may have initially paid for care, only seeking financial assistance for long-term or particularly expensive treatment.

Table 9: Household health care expenditure as a proportion of total income, by income group (excluding transport expenses)

Household Income Group (Baht per year)	North (n=257)	Northeast (n=266)	Central (n=512)	Total Sample (n=1035)
0-5000	7.8	11.2	13.8	9.5
5001-10000	6.0	9.6	9.3	7.1
10001-20000	5.4	8.7	4.3	6.6
20001-30000	4.5	7.2	4.5	5.4
30001-40000	3.2	5.3	5.1	4.7
40001-50000	3.8	5.5	4.9	4.8
50001-60000	3.4	3.9	5.8	5.0
60001-90000	3.4	3.9	3.6	3.6
90001-120000	3.5	4.5	3.8	4.0
120001-150000	1.6	3.0	4.3	3.7
150000+	1.0	2.8	1.9	2.0

Source: Mongkolsmai 1993b.

Table 10: Annual health expenditure by health benefit groups in Phitsanulok, 1993

	Annual health expenditure as a % of annual household income	
Benefit group	before reimbursement	after reimbursement
Low Income Card	6.4	6.1
CSMBS	4.6	1.7
Social Security	1.5	0.6
State enterprise	3.1	2.3

Source: Pannarunothai and Mills 1997

Table 9 suggests that the burden of fees was greatest for poorest households in the Central region, but for other poor groups the burden was greatest in the North East. The problems of the North East are then confirmed by Table 10, which provides data from an urban area of this province. The study from which these latter data are drawn, however, also indicates that LIC holders sometimes choose not to be protected, as they often use private services and so do not take advantage of their right to free care. Indeed, the poor made more than average use of private drug stores and private clinics, and those holding Low Income Cards were relatively high users of private clinics (Pannarunothai and Mills, 1997).

Overall, therefore, household expenditure patterns confirm that the poor are not effectively protected from the burden of health care costs by the LIC. However, they also indicate that this is at least partly a result of household choices concerning where to seek care.

Key findings concerning policy effectiveness:

- the 1990 card allocation increased the number of cardholders by 30%, from 8.2 million to 10.7 million, and increased coverage of the target group to about 75-80%;
- subsequent card allocation rounds have not maintained this level of coverage, with as yet unclear impacts on coverage of the target group;
- despite some improvements in coverage levels over time, the poorest North East region has a disproportionately low share of cardholders when compared with the proportion of its population in poverty;
- about 20-25% of the target group were not covered by a card in the early 1990s, and this may have increased to nearer 30% by the late 1990s (under-coverage);
- about 20% of cardholders may not be eligible for a card (leakage);
- the poor are spending disproportionately high amounts of money on health care.

Most importantly, therefore, whilst coverage has improved as the LIC implementation strategy has evolved over time, a group of 'core poor' remain uncovered and unprotected from the costs of health care and some cardholders choose not to benefit from the protection afforded by the LIC.

7. FINANCIAL FLOWS AND RESOURCE CONSTRAINTS

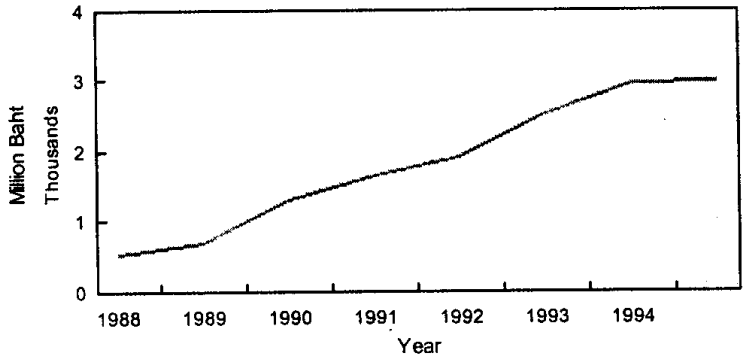
In this section we answer two broad questions:
- what are the budget allocations in support of the LIC and how do they vary between provinces?
- do the available budget allocations cover the costs of the free care provided?

7.1 Medical Welfare Budget allocations[17]

The care provided to LIC holders is funded through the Medical Welfare Budget (MWB). The overall level of the MWB increased dramatically in 1989 from a constant level over the 1980s (Mongkolsmai, 1993a), with additional, relatively high annual increases between 1990 and 1994 generating an overall increase of about 400% in real terms in this period (Figure 6).

However, the distribution of the budget between Regions has been and continues to be inequitable. If the MWB is divided by the total number of LIC holders, the average allocation per LIC holder in 1992 was 169 Baht (at 1990 prices) whereas the poorest region, the Northeast, received only 152 Baht per LIC, the lowest allocation of all regions (Table 11)[18]. By contrast the relatively more wealthy Central Region has the highest budget allocation per LIC holder. Geographical disparities appear to stem from the budget allocation criteria which included a workload factor (50% in 1993 and 45% in 1994). Yet in the Northeast, free care workload was lower than elsewhere because there were fewer facilities and geographical access to these services was more limited.

Figure 6: Free Medical Care (Medical Welfare) Budget allocation, 1987-1995[a]
(at 1990 constant prices)



Source: Rural Health Division, Ministry of Public Health

Note: [a] These figures only include allocations to providers under the Office of the Permanent Secretary of the Ministry of Public Health, and do not include the approximately 15% of the budget allocated to the contingency fund and providers under other Ministries.

17 This section examines budget allocations for free care, which are different from actual expenditures on free care. Expenditure is normally higher than the allocated budget, because hospitals normally spend additional money on free care, using other budget and revenue sources.

18 Mills (1991) found similar disparities in budget allocations between regions in 1980, with the Northeast receiving the lowest per capita allocation.

Table 11: Medical Welfare Budget allocation per person covered by a Low Income Card
(Baht at 1990 prices)

	1988	1989	1990	1991	1992
North	78.0	75.0	135.0	133.0	184.0
North East	61.0	76.0	105.0	133.0	152.0
Central	83.0	97.0	173.0	181.0	198.0
South	76.0	127.0	124.0	145.0	176.0
Total[a]:	68.0	86.5	125.0	146.0	169.0

Note: [a] These figures do not include about 15% of the low income budget, which is allocated to other Ministries and the contingency fund (see Table 4).
Source: Rural Health Division, Ministry of Public Health.

7.2 Adequacy of the Medical Welfare Budget

Using survey data on rates of illness and rates of service utilisation, Supachutikul (1996) estimates that in 1993 an LIC holder had an average of 0.7 outpatient visits per year and 0.03 inpatient admissions per year. Given that the estimated cost of an OP visit at a district hospital was 85 Baht, and the average cost of one inpatient day at a district hospital was 360 Baht (Mongkolsmai, 1993a), the total cost of expected outpatient and inpatient utilisation per LIC holder in 1993 was, therefore, 113.5[19], 55.5 Baht less than the 1992 estimated MWB allocation per LIC holder of 169 Baht.

However, it is likely that this allocation was not adequate to finance all free care delivered at government facilities. The estimated allocation figure of 169 Baht per cardholder overestimates the resources available to LIC holders as the Medical Welfare Budget also finances free care for Type C patients (covering relatively privileged groups), the elderly, children and veterans as well as for the poor without a card (Type B patients). Once the budget is spread over these other groups, the budget per LIC holder in 1992 would have been much lower than 169 Baht - particularly as Type B patients made more claims than other groups (Table 12)[20]. The allocation level would, again, have been much worse in the Northeast than other regions.

The budget allocated to finance free care was therefore likely to have been inadequate in the early 1990s to cover the costs of utilisation by benefiting groups. Table 13 provides specific evidence of MWB shortfalls. Although increased MWB allocations since 1989 have led to declines in the level of these shortfalls, there remained a 25% shortfall in 1991.

19 The rate of hospitalisation was 3 admissions per 100 cardholders per year (Supachutikul, 1996). Given an average length of stay of 5 days, 15 IP days per 100 cardholders per year needed to be financed - or 0.15 hospitalisation days per cardholder per year. The cost of inpatient care per cardholder per year was, therefore, 54 Baht (0.15 x360).

20 Type B patients' greater utilisation of services may, however, overestimate the burden they impose specifically on the Medical Welfare Budget as the hospital has other sources of financing to support their use of care. Type B patients may pay a proportion of the relevant fees for the care they use (Supachutikul, 1996) and facilities should, in theory, partially finance the care they receive through their general budget (50%). In practice, however, all hospital income sources are pooled, and resources used to finance the Type B workload may deplete the resources available for other free care users.

Table 12: Who claims exemptions and subsidies? (1992)[21]

	Number of OP visits or IP days (000's)	% of visits or days
Outpatient visits		
Type A	9,607	38%
Type B	12,024	48%
Type C	3,581	14%
Total	25,212	100%
Inpatient days		
Type A	2,163	22%
Type B	6,951	69%
Type C	936	9%
Total	10,050	100%

Source: Rural Health Division, Ministry of Public Health

Table 13: Medical Welfare Budget allocation compared to actual expenditure on free care, 1989-90 (million Baht)

	1989	1990	1991
Budget allocation	712	1,323	1,680
Actual expenditure	1,891	1,845	2,232
Budget allocation as a proportion of actual expenditure	38%	72%	75%

Source: Rural Health Division, Ministry of Public Health

The largest budget shortfalls were faced by provincial hospitals whereas district hospitals and health centres had less of a budget shortfall in 1991 and 1992 (Table 14). Some facilities even had a budget surplus which had to be spent at the end of the financial year. In part these differences are because provincial hospitals had twice as many Type B inpatient days as Type A inpatient days (whereas the volume of Type A and Type B inpatient days was at a similar level in district hospitals), and this large Type B workload was only partially considered in budget allocation criteria (Supachutikul, 1996). At the same time, the criteria for allocating the Medical Welfare Budget *within provinces* were biased against provincial hospitals, with 'the district' (hospitals and health centres) receiving a considerable proportion of the province's free care funds[22]. In 1994/5,

21 Expenditure data from 1992 reveals a similar picture. For example, in 1992, 58% of total expenditure on free in-patient care supported Type B patients, whilst Low Income Cardholders accounted for only 32% of the expenditure (RHD/MOPH, 1993).

22 The annual meeting in the province to decide on the distribution of the budget between service levels tended to be dominated (in numbers) by district hospital managers. Furthermore, the career history of many Provincial Chief Medical Officers (PCMOs) may have biased their sympathy towards the districts, as the normal career path is to move from a position of district hospital manager to a PCMO (personal communication, A. Supachutikul).

the Bureau of the Budget attempted to counter this bias by imposing centrally determined criteria for resource allocation within provinces which gave more weight to provincial hospitals.

Table 14: Free care budget allocations as a proportion of actual expenditure on free care, at different service levels, 1991

Level	1991	1992
Provincial	44%	40%
District	82%	68%
Health Centre	93%	101%

Source: Rural Health Division, Ministry of Health

Facilities appear to fund their 'extra' expenditure on free care from other income sources, principally the general budget, cross-subsidies from insured (mainly CSMBS) patients, and user fees. For example, the Nan Provincial Hospital 1992 free care monthly budget deficit of 0.5 million Baht was financed through cross-subsidisation, using revenues from user fees and insurance reimbursements (Mongkolsmai, 1993a). However, the MWB resource constraints are a clear concern of policy-makers, who feel that free care service quality may be threatened by them.

Key findings concerning financial flows:

- budget allocations to the overall Medical Welfare Scheme (i.e. free care for the poor, elderly, children, veterans etc.) have increased dramatically since 1989;
- the Medical Welfare Budget is allocated inequitably between regions, with the poorest Northeast region receiving the lowest allocation level;
- Medical Welfare Budget allocations are unlikely to cover the full cost of free care provision, and facilities use other sources of finance to make up for these budget shortfalls (for example from the general budget, or revenue from insurance reimbursements and user fees);
- MWB shortfalls are partially covered through cross-subsidisation from other revenue sources but may also lead to poorer service quality for benefiting groups;
- the magnitude of patients claiming Type B exemptions appears to provide further evidence of the ineffectiveness of the LIC in protecting the poor from the burden of fees.

PART III

8. THE CARD ALLOCATION PROCESS

We answer three questions in this section:
- how were cards allocated in 1994/95?
- how effective was the card allocation process (in terms of leakage and under-coverage)?
- what factors explain why there was leakage and under-coverage?

8.1 An overview of the 1994/95 Low Income Card allocation process

The 1994/95 LIC allocation process was initiated in the study province in July 1993 with the initial understanding that the allocation had to be completed by 30th September 1994, the date on which the 1990 LICs expired. However, there was subsequently considerable delay in taking forward the process as the Ministry of Public Health's (MOPH) new LIC regulations were completed and issued very late. In November 1994 the MOPH informed all provinces to complete the allocation of regular LICs by 31st December 1994, and issued instructions that 1990 LICs could continue to be used until the 1994/95 cards were finally issued. The 1994 cards would then be valid for the period 1st October 1994 to 30th September 1997.

Three main procedural differences were introduced in the 1994/95 LIC allocation round:
- a higher income threshold level for determining those eligible for the LIC;
- the introduction of a one-year 'temporary LIC' (extendable by one year) for migrants, who could apply for it by showing their ID cards;
- the removal of charges to LIC holders for drugs not on the MOPH approved drug list.

Within the province, the card allocation process involved officials at five levels of the administrative and health system: provincial, district, Tambon, village and municipality (see Figure 6).

Provincial level

The main responsibility of the Provincial Public Health Office (PPHO) was to distribute information and documentation concerning the allocation process to all districts, for onward distribution to districts, Tambons, villages and municipalities in the province.

The PPHO began the process at the July 1993 monthly meeting of all district health officials, informing all districts in the province to prepare for the 1994/95 LIC allocation round. However, because of the delay in completing the MOPH LIC regulations the implementation of the allocation process was delayed for several months. Eventually the PPHO head and the directors of the provincial hospital were invited to attend an MOPH countrywide meeting on the new LIC in Bangkok. On return to Phitsanulok the PPHO:
- reported back to district officials in a regular monthly meeting;
- distributed LIC application forms (So Tho 1) and manuals of the MOPH LIC regulations to all districts;
- conducted a general public information campaign within the province concerning the LIC, disseminating information on eligibility criteria, the application process, the place and timing for application through radio spots, local newspapers and press conferences (undertaken by the health education section);
- passed on further instructions or regulation amendments received from the MOPH;
- received and initiated investigations by district offices and hospitals into complaints from people whose applications were rejected, or who did not benefit from amendments to the LIC regulations (such as the removal of charges for drugs not on the MOPH approved drug list).

In general, a senior health official indicated that the PPHO treated the card allocation process as a routine matter. Communication with lower-level offices was undertaken through official letters and the distribution of documents. There were no special meetings to discuss the card allocation process with district offices and to ensure that the steps in the process, and revised regulations, were clear. Perhaps most importantly, and in contravention of the MOPH guidelines, evaluation simply involved informal review of the reports of those officials involved in the process.

District level

Following the practice of the PPHO, the District Health Office in the study district initiated the card allocation process during a routine monthly meeting of all Tambon health officials. These officials were simply informed that the process would soon begin and that they should hold similar meetings to inform Kamnans and village heads in their Tambon. The process was not given particular attention and the only issue emphasised in the meeting was the new, higher income criteria. *"This is a routine work. Such work [card allocation] was already undertaken once in 1990, and would be done once every 3 years"* (Interview, district health official).

Following receipt of the official documents, including application forms and manuals, from the PPHO, the district office passed these on to Tambon health offices, with a covering letter instructing the Tambons to undertake the card allocation. As with the PPHO, the district health office provided little information and undertook little formal supervision or evaluation of the allocation process, simply relying on reports submitted by Tambon health officials on an official form called the "LIC Allocation Evaluation Form". Once village-level processes were complete, the district health office completed the cards (So Tho 4) with the details of each applicant approved at village and Tambon level for the district head to sign and stamp. They were then returned to villages for distribution to cardholders. A delay in issuing cards was caused by the district receiving too few cards from the province.

Village and Tambon level

Although the process of card allocation and distribution broadly followed the official procedures there were some noteworthy differences and there were also differences in implementation practice between the two villages studied.

In COM2 details about the card allocation process were first disseminated within the village by loud-speaker announcements made over a one-month period prior to the application day (Interviews: village head and member of village committee). The village head said that the details of the announcement were given to him by the Tambon health worker who was also a member of the village card allocation committee. The announcement indicated that:

- the LIC programme was a health programme designed to help the poor when they need medical treatment;
- those interested in getting a card must apply on a particular day allocated for this purpose;
- a tent would be set up at the village temple for card application on a specified day.

In addition, the village head said that prior to the application day, he and his deputy personally told villagers known to be poor to apply for a card.

On the day of application, the village head, a deputy village head, and the Tambon health worker interviewed applicants and completed application forms (So Tho 1) for them. The village head said that it was not necessary for applicants to show household registration certificates or identity cards because people in the village knew each other very well. Both he and the health worker also indicated that the most important issue raised in the interview was household income. However, the formal criteria were used flexibly and, when he felt it relevant, the village head used other knowledge about household circumstances to justify allocating some people a card. In practice, all of those who applied for cards were granted them.

Following the interviews, the completed application forms were passed to the Kamnan by the Tambon health worker without any further consideration by a village card-allocation committee. Similarly, in contravention of the MOPH regulations, the Tambon level committee did not meet to consider the applicants but instead the Kamnan simply approved and passed on to the district the list of approved applicants. On receipt of the signed cards (So Tho 1) from the district, he then passed them on to the health worker for distribution to cardholders. When they came to get their cards she told them that they needed to come to the Tambon health centre first when seeking treatment. If necessary, the patient would then be referred free of charge to the district hospital.

In COM1, as in COM2, the Tambon health worker told the village head what information had to be included in the announcements made through the village loud-speaker system one month prior to the application date. The information differed slightly from that used in COM2 as it indicated that:

- those who were holding LIC cards issued in 1990 needed to extend their cards;
- any other poor person who wanted to have a card was asked to apply at the village head's house during a one-week period allocated for this purpose.

After the application period was over, the health worker collected the application forms and submitted them to the village card-allocation committee meeting which considered each allocation individually. Each applicant had to be approved by at least 2 out of 3 committee members. In practice, only one applicant was not approved. As required by the MOPH regulations, the village approved list was then passed on for screening by a Tambon committee, attended by the Kamnan, a Tambon health official, village heads and assistants to village heads.

The Bondaeng village head said that following their approval by the village and Tambon card-allocation committee, the health worker gave him the list of successful card applicants to announce through the village loud-speaker system (the list was also sent to the district level). The health worker's announcement included the fact that those collecting cards should bring with them 10 Baht. Later it was made clear that this money was supposed to cover the cost of a bag of iodized salt under a countrywide campaign against goitre: *"[the health worker] sold a one-Baht bag of salt at 10 Baht each. And, of course, the sale was compulsory for those who came for an LIC card"* (Interview, health volunteer)[23]. Although the village head had no idea what, if any, instructions were given to cardholders on the day they received the card, an interviewee said that the health worker *"asked the villagers to come to the health centre to collect cards. She told us that with the LIC we can have free health treatments at the health centre, and even at other government facilities with a referral issued from the health centre"*.

Municipality level

The procedures followed at municipality level (COM3) differed quite substantially from those used in the rural villages. The only similarity was that an information campaign was conducted using similar messages to those of the rural village campaigns:

> *"The messages focused on inviting the poor to apply for an LIC card. The income criteria were also given. To a great extent, it was emphasised that those interested in applying for a card needed to bring a copy of their household registration form with them on the day of application"* (Interview, health volunteer)[24].

However, the campaign used a greater variety of information dissemination techniques, such as announcements through the loud-speaker system, banners, slide shows in cinema houses, newspaper advertisements, and TV spots to inform people in areas such as COM3. It was also

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23 The campaign was organised by the Division of Nutrition of the MOPH. Salt was initially provided free of charge, but later three different sized bags were sold at 1, 5 and 10 Baht each.

24 The quotes in this section are taken largely from one interview but were validated from other sources.

initiated more than a month prior to the date of application: *"In fact, the first campaign was first launched in town in August 1993".*

In addition, the period of application was longer in COM3 than in the two rural communities:

> *"Due to the lack of clear information from the PPHO, we did not set any particular limit on the time during which people could apply for the LIC. They could come anytime they wanted for card application... ".*

Most importantly, the Municipality decided to grant an LIC to every applicant who completed the appropriate form (So Tho 1) without formal screening of their eligibility by a municipal LIC allocation committee:

> *"Unlike the 1990 card allocation, the 1994/95 process did not need any screening. Why waste your time looking into details of their socio-economic status, which is a lot of work indeed, when you know that all applicants - whether they are poor or not - will be granted cards anyway...It would be your problem if you found that some applicants were not poor and you refused to give them a card. They might complain to the municipal council and you would have to issue a card for them eventually. The best way is, then, give a card to whoever applies".*

Once an application was received, the cards themselves (So Tho 4) were then signed and stamped by the deputy municipal clerk and made available for collection by cardholders at any time during a period of three months. In practice, however,

> *"... we still gave them a card although they were late. Who knows? They might either apply again - this, of course, gives you more work - or go to the municipal council to press you. We want neither of these to happen".*

Finally, although the new regulations made allowance for 'temporary LICs' to be issued to people temporarily resident in a area (e.g. because they were migrant workers), the municipal health office never issued these cards. The reason for this was said to be that *"We don't know when and how temporary cards should be issued".*

8.2 The effectiveness of card allocation procedures

Although this study did not include a detailed survey of cardholders versus income level, there were clear signs that the effectiveness of the 1990 allocation procedure was marred by under-coverage and that there may have been some leakage in the communities studied. It must be noted that information on the 1994/5 card allocation round could not be obtained because it was occurring at the time of this study.

As Table 15 shows, some of those ranked as poorest in both rural villages were found not to hold cards whilst cardholders were found in the medium wealth group. Other data indicate that only 15 out of 36 households ranked as poorest even applied for cards in COM1 in 1990 (41.2%), and only 24 out of 47 in COM2 (51.1%). Although the identification of wealth groups through wealth ranking clearly cannot be related to the official LIC income eligibility criteria, these findings seem fairly clearly to point to under-coverage of the poorest. This was also confirmed by informants at various levels of the system who believed that the poor were not fully covered by the scheme. These included the acting head of the PPHO, the head of the district health office, the director of the district hospital and other officials responsible for card allocation. The acting Head of the PPHO roughly estimated that about 50% of the poor in the provincial capital had not been granted an LIC in 1990. In the study Tambon there were also hints of under-coverage in that the numbers of 1994/5 cardholders had fallen from the 1990 card allocation round even though the numbers of eligible households should have increased because the income threshold was higher. The deputy

Kamnan reported that in one of the villages within the Tambon not included in the study, only 12 villagers were granted cards in 1995, compared to approximately 70 in 1990 (and out of about 100 households).

Table 15: 1990 cardholder allocation at community level

Community/wealth group	Number of households	*percent*	Number of 1990 cardholders	*percent*
COM1 (poor socio-economic status)				
rich	19	*19.2*	0	*0*
medium	44	*44.4*	14	*48.3*
poor	36	*36.4*	15	*51.7*
total	99	*100.0*	29	*100.0*
COM2 (average socio-economic status)				
rich	6	*4.1*	0	*0*
medium	92	*63.4*	6	*20.7*
poor	47	*32.4*	23	*79.3*
total	145	*99.9*	29	*100.0*

Source: wealth ranking exercise

It is more difficult to determine if leakage was occurring. The medium wealthy group of COM1 may all have fallen below the official income threshold level as it was a generally poor village - and even some of those judged as of medium wealth in COM2. Moreover, the findings that a lower proportion of 1990 cardholders came from this group in COM2 than COM1, that a much lower proportion of the group had been given cards and that a much lower proportion had even applied (17.4% in COM2, compared with 34.1% in COM1), suggests that any leakage may have been relatively controlled. However, as discussed further in section 9.3, several informants indicated that cards were allocated to people who were ineligible according to the income criteria. *"Those who are not poor can get the card because they are relatives of the card allocation committee"* (Interview, LIC holder, COM1).

8.3 Factors affecting the effectiveness of the card allocation process

Interviews and discussions at all levels of the administrative and health system within the province point to six key factors undermining the effectiveness of the card allocation process.

Factor 1. Implementation strategy: A top-down process with poor communication

The findings show that decision-making concerning LIC allocations was, in practice, decentralised to village level. Yet, at the same time, the process was implemented in a top-down manner at every level of the system, with little opportunity for discussion and clarification between officials at different levels on how to implement the process effectively. The activity was seen as routine work, not requiring special care, and no special instructions regarding the process were issued from provincial level downwards. Provincial officials were briefed by national officials and simply passed the instructions on to the district level. Thus, the province copied official documents sent to it by the MOPH and passed them on to districts, and officials at district level also did the same thing: *"We just xeroxed the information sent from the province and simply passed it to all Tambons in [the district]. This is a regular way of handling official documents"* (Interview, district official). Even the details included in the covering letter accompanying the forms and manuals sent to Tambons were exactly the same as those in the letter sent by the PPHO to the district office.

This approach may have encouraged some officials at lower levels to give only limited attention to the LIC allocation process because it encouraged a view that the process was a routine matter, not requiring special attention. *"The PPHO gave us only official documents, various forms, and a*

manual, but no clear details on allocation process. We, then, just did what the manual told us to follow." (Interview, municipal health worker, COM3). Even where taken seriously, the lack of information from higher levels caused problems in the process:

> *"The PPHO told us that they would hold a meeting to clarify LIC allocation over a year ago. But no such a meeting was held...And in October 1994, after the LIC allocation regulations were issued by the Ministry of Public Health, I went to the PPHO for other purposes. To my great surprise, I was asked by a provincial public health official if my office wanted forms and manuals on the LIC allocation. If not they would be sent to other offices in need. I had no idea that those documents were left at the PPHO for so long, waiting to be collected by my office. If only we had been informed before we would have collected the documents long before"* (Interview, municipal health official. COM3).

Information problems may also help to explain differences in practice between sites. Different information about the process was given out in each of the three sites, there were different periods during which applications could be made[25] and even different application processes. An example from COM3 illustrates the misunderstandings that arose as a result of limited information[26]. As a result either of misunderstanding or lack of knowledge about LIC regulation changes municipal health workers at first refused to allow patients to continue using the 1990 cards, only reviewing the issue after complaints were received:

> *"...we learnt from people in rural areas that they were still allowed to use their old cards. They confirmed that their 'doctors' told them that the old cards could be used until the new ones were issued. We, eventually, gave a ring to the PPHO to clarify this. And what the rural people told us was confirmed as true".* (Interview, municipal health official).

Factor 2. Implementation strategy: Failure to evaluate coverage and to allocate temporary LICs

Two critical failures resulting from the limited consideration of how to implement the allocation process effectively were, first, that no level conducted a specific evaluation of the coverage of the LIC scheme to determine and address problems of under-coverage or leakage, and second, no temporary cards appeared to have been issued - the research team did not identify anyone in any site who had received such a card. Yet the potential value of temporary cards was clearly illustrated by experience in all three sites. Some of the poorer households not allocated cards in both COM1 and COM2[27] were migrant workers in larger towns. A poor woman who lived in COM3 lamented:

> *"We are a very poor family. My husband works as a tricycle rider, while my 17 year-old elder son drives a fruit-delivery truck. My younger son who is 15 and just left school is now helping me with [hand] laundering. I have done laundry for some households in this*

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25 The longer application period used in the 1994/95 round caused problems for the municipal health office: "[The longer application time] put a lot more work on us because there was no time restriction for card application. We needed to be ready to receive and process LIC applications without a time limit. It was much better in 1990 because of a one-day application time". (Interview, a municipal health worker who claimed to be involved in LIC allocation).

26 A different example came from COM1. An old-aged cardholder is entitled to be referred free of charge even as far as Bangkok. However, believing that the elderly health card only guaranteed treatment as far as the regional hospital, the Tambon health worker asked all LIC applicants to identify any elderly household members as she said only the LIC could help them in getting treatment at higher level hospitals outside the province.

27 At the time of this study about ten people in COM2, almost all men, were working outside the village as construction workers. About half of these commuted back and forth between home and work every day. The rest worked away from home, such as in Bangkok. In COM1 30-40 people commuted to work every day, while nearly 20 households worked in Bangkok. Five people had already returned from working in Taiwan, and another 4 were still there.

neighborhood for years. I get 2-3 hundred Baht per household per month from doing this job...Yes, this included ironing...It would be a great help if we have a card because my elder son needs medicine for his respiratory problems. Of course, we have to pay for this...Although we have lived here for about ten years, our household registration is still in Sukhothai [a neighbouring province]. We have thought about moving our registration to here for a long time, but never done it. Actually, we don't have any idea how to do it. This makes it impossible for us to get the card".

The failure to issue temporary cards seemed to be directly tied to lack of knowledge: most officials interviewed simply did not know about the card. Even those who did know, e.g. at the PPHO, misunderstood the regulations and incorrectly believed that those eligible for the temporary LIC needed to have lived in the area for at least 6 months.

Factor 3. Implementation strategy: Weak implementation of the 'aggressive action' policy

A further problem resulting at least partially from the ineffective implementation process was the failure to take 'aggressive action' to reach the poor, as required by the new regulations. The MOPH intended that officials should not only take particular care to ensure that the poor were informed of the need to apply for the card on designated day(s), but also to seek out those poor people who did not apply, interviewing them and completing application forms (So Tho 1) on their behalf, even after the last official day for applications.

In practice, however, health workers and other officials were fairly passive. Although information campaigns were conducted, some poor people in all study sites indicated that they had received no information about the card allocation process:

"By the application day, we were busy working in our farms without any idea about the application at all...The same thing happened in 1990 when the first LIC scheme was launched, we were not informed about the programme either" (Interview, COM1).

"I've never heard of anything about card allocation at all. And that is why I did not apply. My fellow villagers told me that the village head announced about this through the village loud-speaker system. Maybe I live so far away that I could not hear it...I don't think I would hear anything announced through the system because of the distance" (Interview, COM2).

"I've never been issued any LIC either in 1990 or 1995. I've never come across any messages on it. Anyway, it could be possible that my house is isolated from the rest of the community and I don't have much time to chat with neighbours. I've been working as an aide for an old, long-term patient, from 7 o'clock in the morning till 6 or 7 o'clock in the afternoon ... I might be too busy to get the messages on LIC" (Interview, COM3).

Given the greater variety of information sources in an urban area it is perhaps not surprising that the problem appeared to be worse in the rural villages than in COM3, where only one person interviewed by the research team did not know about the LIC scheme. However, given the small size of rural communities it seems likely that with only limited additional effort the information could have reached those needing it most.

In addition, and despite the regulations, it was unclear how much follow-up there was after the application day to ensure that the poor who did not initially receive cards were later allocated them. All 1990 application forms (So Tho 1) reviewed by the research team in the study areas were filled only during designated application day(s). In contrast, information from COM3 and some from the rural communities indicated that the 1994/95 allocation process continued after the initial period. The head of the district health office serving COM1 and COM 2 said that:

"Even though it is not time to allocate a new card, some district health officials have already asked those who need a card to apply by filling the application form (So Tho 1). Then the form was submitted to the village head for approval. This makes card allocation possible without a meeting of the village committee. A few poor people in this district were already granted a card through this process".

But given the wider passivity of health officials it is likely that there was still only limited pro-active action to reach the poor.

Factor 4. Policy design and context: Problems in using formal income criteria

The formal income criteria were clearly used very flexibly across sites and so seem likely to have resulted in at least some leakage as well as under-coverage. In COM3, anyone applying for the card was given one. In COM1, a variety of other criteria appeared to receive more importance in card allocation (see next section). In COM2, the village headman adopted one approach whilst the health worker on the village card allocation committee used different criteria from those of either the official regulations or the headman. The headman stated that; *"I, however, learnt later that those rejected by me were granted a card because of [the health worker]".* The deputy Kamnan of the Tambon in which this health worker was based also highlighted her individualistic, and influential, approach. Comparing the 1990 and 1994/5 allocation processes, he said:

"The 1990 village card-allocation committee used different criteria from those of [the health worker]. The committee based their judgements of card eligibility on how much money each villager had loaned from the Bank for Agriculture and Agricultural Co-operation. The larger the debt the villagers owed the bank, the more likely they would be granted a card. Unlike the committee, [the health worker] simply based her own judgements on a criterion that anybody owning more than 10 rai of rice field would not be eligible for an LIC because they are considered non-poor. Whether Kamnan was happy with this or not, he had no objection and let it be that way".

The flexible use of the income criteria might partially be a consequence of the top-down implementation process, leading to lack of clarity about the criteria and how to apply them. However, it also appears to reflect difficulties in using them appropriately. The village headman in COM2 said that during the application process:

"We needed to treat some cases specially because an interview result showed that the interviewees were not eligible for a card because of their sufficient income according to the criteria. We, then, had to lower the income figure in order that they could get cards."

His answer to the follow-up question, 'Don't you think they are really better off and do not deserve cards?', was:

"No, that is impossible because we know very well that they didn't have much to eat at all. They absolutely need help. You can ask anybody in this village. They would agree with me...Calculation of household income among farmers is extremely difficult. You might exaggerate or understate it any time...Too many questions need to be asked carefully if you want a figure close to reality".

Participants in a focus group discussion held with poor cardholders confirmed that the village head used his own judgements about who was poor or not and so ensured that the 'real' poor were granted a card.

A further factor leading to flexible use of the income criteria was the influence of particular personalities and 'local politics' over the allocation process. In COM2 although the headman was recognised to be powerful, the health worker was also clearly influential. She was the wife of the Tambon chief health worker (head of all health workers in the Tambon) and a difficult personality.

Even the Kamnan's mother said that *"She is quite moody and sharp-tongued. If she is not happy with anybody, she would scold them"* and the deputy Kamnan said that *"If [the health worker] wants to issue a card to anybody, Kamnan could not say no because of her sharp-tongue"*. The new regulations stipulating that the health worker should be a member of the card allocation committee allowed her to exert considerable influence over the process, even dominating the Kamnan.

In contrast, in COM1 the village headman retained a critical influence over the process despite the new regulations. Three interviews complained about the card allocation process:

- *"A relative of the village head who was granted a card is not poor at all. How could you call a person with 30 cattle a poor man?...This case was raised by a deputy village head and was seriously discussed during the village card-allocation committee meeting. The village head, however, still granted him a card"* (Interview, health worker).

- *"Non-poor people could be granted a card as well, if they 'give money' to the village head. In other words, those who have close connections with the head were likely to be issued a card. In contrast, those who are against him will never get one...It is so sad that health volunteers who attended the village card-allocation meeting were also the head's comrades. They were granted financial support in the 'helping the poor' project*[28]*, although they are not poor at all. Now you can see how easy it is for card allocation to be unjust"* (Interview, retired health volunteer)

- *"those who are close to the village card-allocation committee, especially village head or Samran [an active and influential health volunteer], can get the LIC easily, although they are not poor"* (Interview, poor farmer).

Two examples support these complaints. First, an old, relatively wealthy man whose son was one of the richest in the village, was granted a card probably perhaps because he was well respected in the village as he worked as the chief helper to the abbot and monks in the village temple. But, in addition, his daughter-in-law was a health volunteer, and a good friend of the most active and influential health volunteer. Second, this active health volunteer was herself granted a card although not poor. She worked closely with the village head and was quite influential on the village committee.

The Tambon chief health worker also confirmed that leakage was a problem across villages, saying that some cardholders *"...should not be granted a card because they are not poor. The only reason to make them cardholders is that they are relatives of the village heads"*.

A final example illustrates the general influence of 'local politics' over the card allocation process. A senior municipal health worker explained that the municipal health office practice of allowing any applicant to receive an LIC was a result of past experience. In a previous round of card allocations, some community dwellers had not been granted an LIC. They were so angry that they made a complaint to the Mayor. Seeing it as a politically sensitive issue, it was agreed that further complaints must be avoided by granting the LIC to any applicant.

Factor 5. Policy context: Socio-cultural factors

Two sets of socio-cultural factors seem to underlie the practice of allocating cards to more wealthy groups. Interviews with provincial officials suggested that the practice was quite common in all areas and reflected socio-cultural patterns. *"Although health officials might realise that some who were granted a card were not poor, the officials could do nothing because this is a 'helping each other way'"* (Interview, provincial health official). More specifically, questioned about the

[28] This is a government project aiming at giving financial support to the poor to invest in small occupational projects. The support is normally granted through a village committee meeting.

allocation of cards to those who helped at the health centre in COM1, the Tambon chief health worker said:

> *"I don't think that giving them a card is unacceptable. Of course, they are not poor. I realise that. But, this is a way to express our gratitude to them. Without their support, our centre would be in problems. As you may know, government financial supports are often unreasonable compared to what we have to achieve. Under-budgeted projects could be accomplished only by generous support from our people in the village...Don't you know that granting a card to those people could mean to make them proud and honoured?"*

At the same time, some of the poor within the rural villages believed that the village card-allocation committees were prejudiced against them. A participant in the focus group discussion held for the poor non-cardholders in COM1 said that:

> *"We are poor, so we really need a card. But, we don't have one. They [the village card allocation committee] do not like us. They blame us for not working hard to earn our lives...Yes they think we are lazy. In fact, we work very hard, but sometimes we lose because of droughts or floods. Last year was a good example. We did not get anything from farming due to very bad floods...We have to become unskilled labour in order to run our family - having rice to feed all in the family, and sending kids to school. Having no card means we have to pay when we go to hospital...I wonder that they might dislike us because we are so poor".*

These concerns were confirmed by interviews with health workers, who saw the failure of some poor people to apply for a card as evidence of their indifference. A health volunteer in COM1 reported that: *"Those [poor] people are very hard to deal with. They did not want to do anything even for their own welfare. We are so bored with telling them about the LIC scheme and asking them to apply. They, however, seemed quite indifferent. But, when they have problem paying for their treatments at hospital, they come to us to take action".* Similarly, the COM1 village head felt that:

> *"These people are very difficult to deal with. How could they claim that they did not know about the LIC application. I was the one who urged them to apply for the card because it was good for them when they get sick and need medical treatments. They don't have to pay anything for either the application or the treatments. But, my efforts were in vain. They did not seem to get my messages...But, you know what? When they get seriously sick or involved in a serious accident and need expensive treatments, they always come to me, asking for my approval to make them get free treatments...You can see that they did not even care to apply for the 1995 card."*

However, there were clear signs that cultural factors, rather than indifference, prevented the poor from applying for the LIC. Asked how he felt about not getting a card, a poor villager in COM1 replied:

> *"Although it would be great if I have one. But, it doesn't matter because they [the village card-allocation committee] might agree that somebody else were in greater need for the card than I was. So I don't mind to let those people have it first...Let's put it this way. If I deserve a card they will give me one, for sure".*

This response appears to imply the sense of 'noichai'. The man wanted to have a card, but was not granted one. He was disappointed but did not know how to express his need, or did not want to let the village head see what he really wanted. So he kept quiet and polite, as is common among Thai people - 'be polite even though you are hurt and disappointed'.

A further factor deterring the poor from applying for cards was poor experience in their previous

use of the card - such as the receipt of poor quality care, or still having to pay for care despite holding the card (see section 9).

Factor 6. Policy context and actors: The marginalisation of the poor

Various experiences point to the special difficulties of targeting the poor through the allocation process because of their multi-faceted vulnerability. The situation of all three communities studied, and the descriptions of those defined as poorest within them, highlight the inter-connection of economic and social marginalisation. Thus, it was difficult to reach the poor through information campaigns because they live far from the main village/settlement areas and because their lifestyles mean that they work long hours away from their homes. At the same time, even if they did find out about the LIC, socio-cultural traditions, such as 'noichai', might prevent them from applying for a card or complaining if they were not allocated one.

Key findings concerning the card allocation process:

1. There were clear signs of ineffectiveness in the 1994/95 card allocation process in the study sites as a result of under-coverage, and possibly some leakage, in relation to the usual LIC, as well as a complete failure to allocate the new 'temporary LICs' to migrants.

2. The most important factors leading to these problems were:
- the application of a 'top down' and linear process of implementation, which encouraged all officials to treat the allocation process as a routine matter requiring little special attention
- the total failure to evaluate coverage formally and clearly, and to use information from such evaluation to guide further allocation efforts
- the weak implementation of the 'aggressive action' policy, introduced to offset under-coverage, at all levels of the system
- the difficulty of using formal income criteria as a way of identifying the truly poor
- the limited and flexible use of formal income criteria, supplemented by a 'rule of thumb' approach
- the influence of local politics over card allocation, with clear potential for dominant personalities (e.g. headmen, health workers) to determine the outcome of the allocation process
- the role of socio-cultural factors in encouraging leakage to prominent people within society, and discouraging the low income from demanding their 'rights'
- the multiple vulnerabilities and marginal situation of the poor (which only emphasise the need for a carefully planned and strongly implemented programme directed specifically at them)

3. These various factors indicate the critical influence of the policy context, actors, design and implementation strategy over effectiveness.

9. THE LOW INCOME CARD'S IMPACT ON HEALTH CARE UTILISATION

We answer five questions in this section:
- what is the general pattern of health care utilisation in the study communities?
- what factors influence utilisation patterns?
- how does holding an LIC influence health care utilisation?
- what other benefit schemes are used by people in the three sites?

9.1 General health care utilisation patterns[29]

Perceived severity was found to be a particularly important factor influencing utilisation patterns. Consequently, the following general description of health care utilisation patterns is based on three categories of perceived illness severity: minor illness, chronic illness, and severe illness.

Minor illnesses

In general, there appears to be a hierarchy of utilisation patterns between areas for minor illnesses. Self-treatment is a common first step in all communities, followed by, or combined with, use of the Tambon health centre for most people in rural villages.

> *"When I felt muscle stiff and pain, I bought a package drug from a shop in the market in the Tambon (subdistrict). It cost me one Baht. It could relieve my pain, so I was able to continue working in the rice field"* (Interview, low-income non-cardholder, COM1)

> *"...My daughter visited the health centre for her cold a couple months ago, but my family always buys and spares some paracetamols or other package drugs for use in case of having a headache and other minor illnesses such as common fever. We buy those basic drugs from the health centre or from shops in the village".* (Focus group discussion, low-income non-cardholders, COM2A)

> *"For the minor illnesses like these [colds and cough], we mostly bought drugs from shops. However, when my children were ill, my wife took them to the health centre".* (Interview, middle-income non-cardholder, COM2A)

In COM2A there was only one middle-income LIC holder who self-treated rather than seeking care from the health centre for a minor illness. Participants in the community committee focus group discussion even suggested that:

> *" ..Nowadays, the villagers here are less likely to buy drugs from shops in the village since they only sell pain-relieving drugs, such as Thamjai [a local tradename for a popular pain-relieving drug in rural Thailand], while the health centre is improving, so the villagers go there".*

However, all the villagers living in COM2B preferred to self-treat or to use the local injectionist rather than visit the local health centre:

> *"I have never used the [LIC]. For minor illness, I did not go to the health centre, but I mostly took paracetamol. Buying drugs from shops was convenient. My house is on the*

[29] It is important to remember that the health centre serving COM2 is located on one side of the river cutting through the village: those in COM2A, where the facility is located, thus, have much better access to it than those in COM2B.

other bank of the river just opposite to the health centre, but it is difficult to cross since no boat in service is available" (Interview, low-income LIC holder).

Similarly, people living in COM3 make little or no use of the municipal health centre but might use private clinics or the regional hospital outpatient department even for relatively minor illnesses.

> *"Whilst the card was effective I did not go to visit the municipal heath centre because I was healthy. However, whenever I had minor illnesses I bought drugs from drugstores. Once when I had difficulty with breathing I stayed overnight at the regional hospital. At that time my LIC was expired, I had to pay 1,500 Baht but I requested them to pay less (use type B patient), then I paid only 800 Baht ".* (Interview, low-income LIC holder)

Those ranked as middle-income in the rural villages appear to be more likely than the low-income to use care available from private clinics/hospitals outside the village after perceived treatment failure at the local health centres.

Chronic illnesses

The longer duration of chronic illness gives people the time to 'shop around' in seeking effective treatment. They often use several sources of care, including modern and traditional remedies both from inside and outside their communities, either sequentially or at the same time. They may even seek care outside the province, especially from traditional healers and government hospitals. The 'shopping around' approach is well illustrated by two interviewees in COM1:

> *"Recently, my wife was paralysed. She sought care from various sources encompassing the injection doctor, the private doctor clinic in [the provincial capital], and the traditional healer in [a northern province]"* (Interview, low-income LIC holder)

> *"Once my husband was faint because of his hypertension. We went after [an injection seller]. He came to my house and treated him with one injection. The anti-hypertension tablets which my husband got from the health centre had almost run out. There was only one tablet left. I reminded him to get it from the health centre but he had not gone there yet"* (Interview, middle-income LIC holder).

Partly as a result of this approach the local health centre plays a less important role in chronic illness care than minor illness care in both rural villages. In COM2B villagers tend to use the local injection seller, who sells both injections and other drugs, as well as drug stores located locally and in nearby urban areas, government hospitals and traditional healers for chronic illnesses. For example, a middle-income cardholder who suffered from stomach pain resorted to a drug store in the district headquarters after failing to see the health worker at the Tambon health centre:

> *"I had self-treated by buying drug from drug stores in the district... [the injectionist] came to my house and treated me with an injection drug"* (Interview).

In COM3, the municipal health centre again plays little or no role in chronic illness care. Instead, there appears to be more use of the greater diversity of private providers than in rural communities and frequent resort to the regional hospital (for outpatient and in-patient care).

Severe illness

In cases of severe illness, the common pattern across communities is to use either private or government hospitals. A focus group discussion with low-income non-cardholders in COM1 indicated that they often use private medical care provided by the local injectionist, private medical clinics or even private hospitals in the provincial capital. Similarly, in COM2A a poor non-cardholder said:

"I almost died from serious coughing, and I did not want to be in a long waiting line at the (government) hospital, so I went to a private hospital and was admitted for two nights. I paid almost 4,000 Baht for all the services. I borrowed money from one of my neighbours with 3 percent interest rate" (Focus group discussion),

whilst in COM3 a low-income non-cardholder said:

"For minor illnesses, I bought drug from the shop because it is cheap, only 3 Baht for a single dose. However, when I had serious illnesses, I went to see private physician at the clinic".

9.2 Factors influencing health care utilisation behaviour

The discussions with people in all sites suggested that three factors, in addition to perceived severity, appear to underlie health care utilisation behaviour:

- perceived quality of care, judged in terms of the perceived efficacy of the medicine and the outcome of treatment, the competency of doctors or other health care providers and the courtesy of the providers;
- accessibility of health care resources, judged both in relation to proximity and factors affecting the convenience of using a health care source such as opening hours and waiting time;
- cost of services.

Perceptions of private care

Community members often judged private care to be of better quality than public services. Drugs are, for example, important to perceived quality and many people, particularly in the rural areas, perceive that injection drugs are 'stronger', and relieve symptoms more quickly than oral drugs, particularly for treatment of chronic pain[30]. Thus, information from the focus group discussion with low-income non-cardholders in COM1 revealed that many of them seek care from the local injectionist because:

"He is good in injection. He had been doing this job for many years. He could give treatment using injection drugs for several kinds of sickness, such as asthma, cough and others. We think of him first when having illness"

Two women also reported in a focus group discussion LIC holders in COM2A that: *"going to private clinics is better because there is effective drugs and good equipment"*. And a middle-income cardholder in COM2A reported that although the new health worker was offering a reasonable service, his wife still preferred to travel 24 kilometres and to wait for a long time before seeing a private practitioner at his private clinic because *"the doctor there is really good and his treatment could help my wife recover from her illness"* (Interview).

In addition, the common preference for self-treatment of minor illnesses through drug purchase from local shops reflects the easy access to, and convenience of, the shops:

"I am used to taking 'para' (paracetamol) bought from the shop. The shop is very close, just about there. Though, I do not have to pay for it if receiving from the local health centre but it was farther" (Interview, low-income LIC holder, COM1)

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30 It is interesting to note that many health workers also work as injection sellers privately, and encourage patients to use these 'private services'. "If we use the card at the health centre we could obtain tablet or liquid drugs. But we had to pay for injections. If we use the LIC card we get lower quality drugs than if we pay. If the illness was really bad we have to find money to buy better drugs at the health workers' private clinic" (Interview, middle-income LIC holder, COM1).

"Buying drugs from shops is convenient. My house is on the another bank of the river just opposite to health centre, but it is difficult to cross since no boat in service is available". (Interview, low-income LIC holder, COM2B).

In both COM1 and COM2B injectionists were also often preferred because of their greater accessibility:

"I prefer resorting to [the local injectionists]. It was inconvenient to cross the river to visit the health centre since she I had no boat. It was better to take a motorbicycle to see the injection doctor at his place rather than to go to the health centre." (Focus group discussion, LIC holders, COM2B).

Finally, sometimes using private providers has cost advantages. For example, it is possible to buy a limited amount of drugs from shops rather than, as at a health centre, having to buy sufficient for a full treatment course:

"When we buy something [at the shops] we could bargain the price, but when visiting health centres we could not ask for discount. We had to pay the exact amount they charge, whatever 150 or 200 Baht. Though we do not have enough money to pay, we have to make it" (Focus group discussion, LIC holders, COM2B)[31].

And private providers may adopt flexible payment practices - a low-income LIC holder in COM3 said she always sought care from a private medical clinic:

"when I have a minor illness I visited the private clinic because the doctor there knows that I am poor and having many children. He always charges me less than other clients, less than 100 Baht per visit" .

Perceptions of public care

In contrast to private providers, government health care facilities often do not provide the drugs preferred by villagers: a middle-income LIC holder in COM2B who had suffered from stomach pain said that:

"When I was painful, I got treatment from [the injectionists]. They come to treat me at home. A single dose of injection costed 80 Baht. I did not go to the health centre because they did not have injection drug ....." (Interview).

In addition, various access problems deter use of the Tambon health centres:

"I self-treated by buying drugs from drugstores in the district. Sometimes I could find a boat to cross to the health centre, but when I got there, the doctors (health workers) were not there". (Interview, middle-income LIC holder, COM2B);

"I always have a problem during night time when the local health workers were absent from the health centre. Therefore, mostly I have to visit one of them at her private clinic" (Interview, low-income non-cardholder, COM1).

Some villagers highlighted the problems implied in the second quote by saying that *"our illnesses do not have official hours or any weekend".*

Similarly, the long waiting times experienced at public hospitals deterred their use:

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31 Although these were cardholders, they may have legitimately had to make a payment for some drugs or have been required to make an illicit payment to the health worker.

"Visiting [the regional hospital].....we have to wait for many hours until noon before receiving treatment. This is not including waiting time for prescribed drugs. Many times we missed the public bus and have to hire a car for more than 200 Baht instead of paying only 20 Baht for the public bus fare. The public bus is in service between COM2B to town one trip a day, leaving in the early morning and is back from town at noon." (Interview, middle-income cardholder, COM2B),

particularly in COM3 and in comparison with the convenience of private practitioners:

"we went to visit private clinics or bought drugs from drugstores... It was convenient to visit private doctors in the evening after finishing from work. We preferred paying 200 Baht at the private clinic to paying 50 Baht at the hospital but had to wait for a half day." (Interview, poor non-cardholder).

Perhaps the least well-used government health facilities of those in the communities studied was the municipal health centre in COM3. Before 1990 it was poorly perceived because there was no doctor, and even once one was placed in this facility people were deterred from using it because of its distance from them.

An important consequence of perceived poor access to public providers is that the total money and time cost of using government facilities is seen to be greater than the use of private alternatives.

"I am very poor; the cost of health care is a great burden. I have to borrow from my relatives. They do not ask for interest. I have self-treated by buying drugs from the shop because it is convenient. The basic drugs costs me not much. Visiting the health centre is costly" (Interview, low-income LIC holder, COM2B).

Nonetheless, all groups fall back on public sector care when they think that the cost of private care is likely to be too great - such as for severe and chronic illness.

"I did not have much money and preferred to go to regional hospital, since it was cheaper than to go to private clinic or private hospital" (Interview, low-income non-cardholder, COM3).

9.3 Use of the LIC and its influence over health care utilisation

LIC: general perceptions and influence on health-seeking behaviour

The LIC was, in general, highly valued by all community groups within the three study communities because it guarantees the holders access to free care. This was seen to be particularly important for low-income groups who might not otherwise be able to afford health care:

"I got it [the LIC]. I was really glad as if I was going to the heaven" (Interview, low-income LIC holder, COM3);

"I visited the health centre. Having the card is an advantage because whenever we have no money we still have drugs to take" (Interview, low-income LIC holder, COM1).

In addition, using the card was seen by some either as ensuring reduced price access to drugs or even as, in consequence, enhancing access to better quality drugs than normally obtained from private sources of care. These views are clearly at odds with earlier statements concerning some advantages of private practitioners and highlight the variety of views within the communities.

"I don't see any difference in quality of care between cardholders and non-cardholders. It is, then, better to have a card because you don't have to pay anything for treatments in government facilities" (Interview, middle-income LIC holder, COM2A)

"Before obtaining the card, I bought 'Tham Jai' (a local trade name of drug relieving pain and fever) or took 'Ya Mo' (a herbal pot medicine) for my illnesses. At the beginning of getting the card, I dared not use it since I did not know what kind of treatment I would get. Later on, I used it and found that I could get free drugs, such as 'para' which its quality is better and more convenient than "Ya Mo'. Since then I visited the health centre and stopped having 'Ya Mo'" (Interview, low-income LIC holder COM2A)

"Before getting the LIC, I often used to go to the injectionist and pay 50 Baht for a single injection. I also self-treated by buying drug when being faint and having a headache. After getting the card, I visited the health centre twice a month and did not have to pay. I visited the injectionist only one time and did not return to her any more because the medicine obtained from the heath centre could help my illness" (Interview, low-income LIC holder, COM1).

In addition, all cardholders, regardless of income level, also valued the LIC as a 'safety net' for high cost illnesses: either chronic illnesses, requiring continuous drug treatment, or when admitted to government hospitals for emergency and serious illnesses.

"We don't want the government to cancel the LIC. It is very helpful for the poor, especially, whose family's members are suffering from chronic illness or have been involved in an accident" (Focus group discussion, low-income LIC holders, COM1)

"The card will be a great help for our family because we can get free treatments in case of illness or accident. I still remember how bad it was years ago when I had to borrow 2,000 Baht from my neighbour with a 5% per month interest rate. I desperately needed the money to cure my severely ill wife who was admitted at the [district hospital]... I wish we could get the card" (Interview, middle-income LIC holder, COM1)

"Before getting the card my husband went to visit the TB Centre. Sometimes he bought drugs from shops in the market. After having the card he still buys drugs from shops and also visits the TB Centre as usual. The card is used for severe illness which need to visit a hospital" (Focus group discussion, middle-income LIC holder, COM3).

Factors deterring use of the LIC

Yet despite the value placed on the LIC, the general factors influencing health care utilisation also affect use of the LIC. Perceived quality, cost and access barriers to health facility utilisation were not necessarily offset by the offer of free services.

There were, in particular, specific views about the impact of using an LIC on the quality of care received. The 'lower' quality of drugs provided to LIC holders at the health centre was frequently mentioned by villagers, perhaps because of the regulations covering drug provision to LIC holders. Before the time of the study only drugs included on the government's essential drug list were free to LIC holders but the 1994/95 regulations introduced free care for all drugs officially provided at the health centre level. In practice this did not cover the injections perceived by the majority of the rural villagers as having 'higher' quality than a tablet or a liquid as Tambon health workers were not allowed to give injections. In addition, some perceived that the quality of care provided to the LIC holders at hospitals was lower than that provided to those who had money to pay or those who were holding other health cards such as the voluntary health card.

"Holding a LIC had both an advantage and disadvantage. We could obtain drugs for free, but not the injection drug. The disadvantage was that when we use it at a hospital they (doctors and other health personnel) paid no attention to us. They took more care for those who had money to pay". (Interview, low-income LIC holder, COM2A)

"Having LIC was good but it also has disadvantage. My sister-in-law used it at .... hospital. They did not pay attention to us. They thought we did not have money. They paid less attention to us, and it is differently from what they did for the well-to-do". (Focus group discussion, low-income non-cardholder, COM2A)

"My wife used to use the card at the health centre when she had headache. The health worker gave her both tablet and liquid drugs. But if she would like to have an injection, she could not use the card. Using the card obtains the 'lower' drugs, paying get 'higher' drugs. Thoug the LIC is not good, I still want it because it could help when we have no money. Drugs at the health centre could alleviate some symptoms, such as 'para' or liquid drug for treatment of peptic ulcer. If our symptoms are not better, we try to find money to buy 'higher' drug at health worker's private clinic". (Interview, middle-income LIC holder, COM1)

"Since I got the card, I have never used it. I did not know when and how to use card. I heard that clients using the card would obtain only low quality drugs and had to wait longer. Clients who pay for treatment would get the service first. I prefer buying drugs from shops if symptoms were not so serious" (Interview, middle-income LIC holder, COM1).

The perception that cardholders receive poor quality care was also confirmed in a focus group discussion with village committee members in COM1, and in a focus group discussion with health volunteers in COM3 who said:

"The quality of care for clients holding different types of health card is different at Phut hospital. The quality of drugs obtained by using LIC is different from paid drugs. They are both effective in treatment but at different grade, though".

Two problems were raised, which compounded the general access barriers and encouraged greater use of injectionists who provided injection drugs upon client's request.

1. For middle income cardholders, in particular, the need to *follow* the referral system when using the card was a factor discouraging its use in the rural areas studied:

   "It was very inconvenient and troublesome to get a referral card at the health centre because I need to have a boat to cross the river. And sometimes health workers were not available for giving services there." (Interview, middle-income LIC holder, COM2B)

   "I had a card, but I did not use it because it took too many steps to follow the government referral system." (Interview, middle-income LIC holder, COM1).

2. A more general concern across communities was the continuing need to pay despite holding the LIC, discouraging use of the LIC and encouraging use of other providers.

Participants in the focus group discussion of low-income LIC holders in COM2B complained that even when they showed their LIC they had to pay: 5 Baht for getting the LIC; 5 Baht for a contraceptive pill; and again for injections not covered by the LIC and perceived to be 'stronger' drugs. Two low-income people holding 1990 LICs said that they continued to self treat and to seek care from injectionists for their minor illness, despite holding the card, because they had to pay 15 to 20 Baht when visiting the health centre even when they showed their card. As a result they

intended not renewing their LIC in the 1994/95 round. Similar problems were also raised in in-depth interviews.

> *"I never got free drugs. I had to pay every visit. I did not go to the health centre for a long time. When I was sick, I visited [the local injectionists]. When I had no money, I could owe them"* (Interview, low-income LIC holder, COM2B)

> *"I went to obtain stomach pain relief drug. I showed the card but still had to pay. [The health worker] said that Ya Luang (the government drugs) were not given free. It was 20 Baht a bottle"* (Interview, low-income LIC holder, COM2B). His wife added: *"No need to have the card because having it we still had to pay. That's why we did not want to renew the card"*[32].

These problems may have been generated by poor understanding of the services that could be received free of charge with the card, but the experience also suggests that health worker behaviour and attitudes influence charging practice as well as the user-friendliness of the service provided. As they were officially not allowed to provide injections, any given by Tambon health workers were, therefore, a form of 'private practice'.

Further evidence of the influence of health workers can be discerned from the experience of COM2 where, due to regular changes in the health worker based at the local health centre, three different periods of LIC use can be identified.

In the first period, just after the 1990 distribution of LICs, the health worker who was the head of the local health centre did not inform the villagers about the benefits of the LIC. LIC holders did not know they were entitled to get free services, or what kind of drugs were provided free of charge under the scheme. Even when they visited the local health centre they found they still had to pay for the services. Not surprisingly they saw little benefits from the LIC.

During the next period, the villagers, particularly those living in COM2B, were directly informed about the LIC benefits and so both low- and middle-income LIC holders used the scheme. Finally, in the present period, LIC holders on both sides of the river in COM2 continue to use their LICs at the local health centre, receiving more varieties of drugs at no cost. Many of the villagers commented that the current health worker was nice and gave better services than previous health workers.

> *"At the beginning period of obtaining cards the villagers did not know that they could get the services from the health centre free of charge. [The first health worker] refused to accept the card and she charged. When I knew from [the second health worker] that we could get a variety of free drugs from the health centre, I announced this to my neighbours. Since then, the villagers who had LIC visited the health centre whenever they were ill"* (Interview, middle-income LIC holder, COM2A)

> *"Previously, [in the first period] [the health worker] had never informed us how to use the card and whether or what kinds of drug were free or had to be bought. So I had never brought my card when I visited the health centre. I paid every visit. When my card was renewed [during the second period], I still did not use it because I heard that we could only get paracetamol free. But recently [the present period], [the health worker] has clearly explained all the benefits of the card. Therefore I currently go to obtain anti-histamine drug for treatment of weather allergies for my son".* (Interview, middle-income LIC holder, COM2A).

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32 Although this couple had held a 1990 card, they did not renew their application in the 1994/95 allocation process.

One of the 1994/95 non-cardholders in COM2B who had previously held an LIC mentioned that:

> *"I had to pay even if I showed my LIC, so I did not want to renew it when it was expired. But now I would like to have it because [the health worker] is good."*

A further barrier to card use highlighted in discussions across villages seems to reflect both health worker behaviour, and accepted socio-cultural values. Low-income cardholders, in particular, felt that health workers discouraged them from attending the health centre and using their card too often, making them feel inferior and embarrassed. As a result, they preferred to buy drug from shops. The perceived or actual manner of health workers made many LIC holders feel 'kraeng-jai' in relation to their use of the card. Rather than seeing the receipt of free drugs as a right, they thought that they had to beg for these drugs from health workers and that the health workers would not be happy with clients who ask for free services or drugs 'too frequently'.

> *"I went to the health centre asking for a basic drug, and got it free of charge. I did not often go to ask for free drugs, 'Kreng Jai Moh' (she did not want to dissatisfy the health worker). Therefore, I bought drugs from shops".* (Interview, low-income LIC holder, COM1).

> *"Sometimes I self-treat because I do not want [the health worker] to complain that I often get free drugs from the health centre"* (Interview, low-income LIC holder, COM1).

> *"Having the LIC has advantages. Going to get free drugs from the health centre was convenient for me. But, if I got 20 tablets and I took them once a day, they would run out within 20 days. Then, if I go for free drugs again, [the health worker] would say that I come and ask for too many drugs. She would refuse to give me some more".* (Interview, low-income LIC holder, COM1).

In contrast, and not surprisingly, one or two discussions suggested that use of the LIC did not stigmatise middle-income users:

> *"The well-to-do applied for the card because they did not want to pay. For me, I mostly used the card for getting free drugs..... I do not feel embarrassed using the LIC at the health centre or hospital"* (Interview, middle-income LIC holder, COM2A).

Overall, therefore, despite the good perceptions of the card the combination of poorly perceived public care and specific problems resulting from the use of the LIC ensures the continuing importance of self-treatment and private sources of care. A shop owner in COM1 said:

> *"Most of my clients buy pain-relieving drugs. I just opened this shop two years ago. Drug shops here in this Tambon compete with the local health centre because the health centre opens late at 9 am. and closes at 4 pm. In addition, the health worker would complain if LIC holders ask for free drugs too often. So, many LIC holders still buy drugs here because they also have to pay for drugs at the local centre. For those LIC holders who earn their living on a daily basis, some go the health centre, some buy drugs here. The clients here are both LIC holders and non-LIC holders. After launching the government LIC scheme, the number of clients did not change".*

This was confirmed by a popular herbalist and injectionist in the same village:

> *"The number of my clients now is about the same as it was five years ago. Those who are holding LICs still come to buy drugs here because this village is far from the health centre (about 1.5 kms.). But some of them asked their children to get free drugs from the health centre. The elderly still come and buy drugs here. Most of clients as well as those from Village 5 (where the local health centre is located) would come here at night. They*

could knock on the door to buy drugs here, even 4-5 pm. until midnight. The LIC scheme did not affect drug selling here."

Cardholders confirm these views and indicate that, despite the value of the LIC in times of severe illness, they may continue to prefer private sources of care for some serious illnesses:

"Before getting the card, I self-treated for minor illness. If the symptom became more severe, I went to see the injectionist .... After having the card, I visited the health centre instead of self-treatment for minor illness. But for more severe illness I still seek care from the injectionist." (Interview, middle-income LIC holder, COM1).

9.4 Availability and use of other benefit schemes

Other benefit schemes available to people within the three study sites included:

- the voluntary health insurance card (VHC)
- the senior citizen card;
- the social welfare card from the Ministry of Interior;
- monk cards;
- the use of 'type B' exemptions at hospital level.

Use and perceptions of VHC

During the period of data collection of this study, VHC cards were not available for sale in any of the three areas studied, although they were available in some nearby villages. Most villagers did not know about the VHC and few people in either of the villages appeared to use it. Only 2 or 3 people in COM2 actually had the card and one person in COM1 had it but never used it.

"I have never known the 500 Baht card (VHC). I don't have money to buy it" (Interview, low-income LIC holder, COM2B)

"I've never heard about the VHC."(Interview, middle-income non-cardholder, COM1).

Some discussions in COM1 pointed again to the influence of local health workers over card-related practices. They were said to oppose the sale of VHCs because of concern at the possible negative reactions of villagers. According to VHC guidelines, two health facilities are nominated as the place of first and secondary use: usually the health centre located nearest the village is the first choice and the community or district hospital, the second choice. The health workers appeared to be concerned that the villagers would then be dis-appointed by the limited range of drugs available at the health centre.

Questioned about the VHC's affordability, some low-income villagers expressed concerns but some middle-income villagers felt if offered value for money.

"I am not interested in the 500 Baht card at all because I don't have money". (Interview, low-income LIC holder, COM2B)

"When we are sick where could we resort to (if no card). Paying for one sickness sometimes costs more than 500 Baht. I could earn that amount (500 Baht) by working a few days. It is better to have at least one card." (Interview, middle-income LIC holder, COM1)

"VHC 500 Baht is not expensive. A whole family member can use it all year round. A nurse told me about that." (Interview, middle-income LIC holder, COM1).

Others considered its value in relation to other schemes:

> *"I had never thought about VHC because LIC make us access health care free of charge."* (Interview, middle-income LIC holder, COM1).

Use and perceptions of Type B exemptions

Few people in either village admitted to claiming type B eligibility when visiting the hospital but those who did included some LIC holders. Some preferred using the type B exemption because they were worried that use of the card would generate poorer quality care (Interview, low-income LIC holder, COM1). A middle-income cardholder from COM1 whose son broke his leg in a motorcycle accident said that:

> *"If I use the LIC, they will leave him die. My son was admitted to hospital for 30 days. The total expense was over 10,000 Baht, I requested a discount and finally paid 1,500 Baht".*

Other LIC holders, as well as non-cardholders, appeared to use the type B route simply because it allowed them to receive care at a reduced rate - perhaps without having to follow the formal referral route.

> *"Last month my husband was admitted to Puth hospital with peptic ulcer and hepatitis for 10 days. I asked for Type B status and paid only 1,600 Bath from the total 7,500 Bath"* (Interview, middle-income non-cardholder, COM3)

> *"My wife used to use Type B when she was seriously ill. She stayed overnight at [the provincial hospital]. We got reduced a lot but I do not remember how much."* (Interview, middle-income LIC holder, COM2A).

The overlap between the LIC and the type B exemptions seemed to be particularly great in COM3, where the municipal council easily provided support to a patient's claim to be poor thus enabling them to receive a Type B exemption. As a municipal health worker said:

> *"The amount of money from exempted treatment costs among type B patients recommended by municipal authorities was so high that once the hospital delivered a notice to the municipality. The notice showed that over 100 million Baht was used during a course of one full year of 1994, thus, the municipality should be more serious on screening type B patients".*

Perhaps as a result, the LIC programme was seen by one of the municipal health workers as 'nonsense':

> *"The LIC does not make any sense for poor people. I really don't understand why such a programme is necessary. In the past, the poor did not need such a card in order to help them receive free treatments from government health facilities. They always had access to free health services. This was because when health workers saw that their patients were poor, they were, then, considered type B patients, and treatments were rendered to them free of charge... Charges were levied only on those able to reimburse from their employer, either the government or private company. This, to some extent, made our health facilities sustainable, while the poor were covered by the type B patient scheme. This makes sense to me".*

She wrapped up her comments with a question, '*What is the difference between having and not having the LIC card?*'.

Other cards/insurance

Other important health cards mentioned by few key informants in this study were the seniority medical welfare card, student health card, monk card and health volunteer card. Those who held these cards could get free medical care from the government health facilities. For example:

> *"I always fell down because of imbalanced walking . I visited many hospitals including the regional hospital. I did not pay for medical care because I have a seniority medical welfare card."* (Interview, middle-income LIC holder, COM1)

> *"I always visit a private clinic and pay 100-200 Baht per visit. If my illness is serious and I have to pay more, I will go to visit the regional hospital because I can use my Health Volunteer Card; and I do not need to pay there."* (Interview, health volunteer, COM3).

A middle-income elderly person in COM2B often resorted to using a private hospital for his hypertension problem even though he held a senior person's card, because the cost of the care provided could be covered by his son who was a government official.

It is interesting to note that some people, particularly the elderly in both urban and rural areas, hold several cards at the same time in order to guarantee reduced cost access to health care when required. Nonetheless, people expressed a preference for the LIC because it guarantees free care unlike their perception of other cards. For example, the COM1 health worker had told villagers that the seniority card is not as good as the LIC because the former can only be used up to the provincial hospital level, whereas with the latter a patient can even be referred free of charge to Bangkok.

Key findings concerning utilisation patterns and LIC use:

1. The identified patterns of health care utilisation reflect experience reported in the international literature: they differ considerably between rural and urban areas, and indicate considerable use of a range of private health care providers.

2. The most critical influences over utilisation include perceived severity, perceived quality of care, access and the perceived cost of care, again reflecting experience reported in the international literature.

3. The LIC is generally highly regarded as a protection against the cost of care, especially for the low income and in cases of chronic or severe illness for higher income groups.

4. Use of the LIC is, nonetheless, largely a function of the inter-play of the main factors influencing general patterns of health care utilisation.

5. The main LIC-specific factors which influence its use are:
- for some, the fear of receiving lower quality care than non-LIC users;
- the need to follow the referral chain within the health system;
- experience of paying for care even when using the LIC;
- the attitudes and behaviour of the health worker, as an element of perceived quality and as a direct influence over whether or not use of the LIC is associated with some payment for care received;
- socio-cultural values which may be further enforced by health worker behaviour, and discourage lower income groups from using the health centre with their LIC 'too much'.

6. These perceptions and experiences discourage some low income people from applying for the LIC in subsequent allocation rounds.

7. Other insurance cards/mechanisms are also held and used in the sites studied, providing a sort of 'package insurance', but:

- there was little or no use of the voluntary health card;
- apparently little use of type B exemptions;
- some concern over the duplication between the LIC and type B exemption.

PART IV

10. OVERALL CONCLUSIONS AND RECOMMENDATIONS

10.1 Overview of findings from study

The LIC scheme has been successful in many respects. As the survey data presented in Section 5 show, the effectiveness of card allocation has improved over time with declines in the extent both of under-coverage and leakage. The card is not only well accepted by community members but the gradual evolution and strengthening of the card allocation process has enhanced the effectiveness of its allocation. As the in-depth case studies show, the card is greatly valued, because for the poorest it protects against the cost of both minor and more serious illness and, for higher income groups, it provides a safety net: free access to government care, in cases of expensive chronic or serious illnesses, or illnesses not effectively treated by other providers.

Despite these successes, survey figures also indicate that there has been both some under-coverage and leakage, and these were confirmed by the in-depth case studies. In addition, these studies indicate that cardholders are not guaranteed access to free or reduced price care of a quality they perceive to be adequate. They continue to choose private care in the face of these problems.

Findings from the case studies indicate that the most critical factors explaining the identified problems reflect other international experience and can be grouped into three categories: administration problems; socio-cultural problems; and informational problems (Gilson *et al.*, 1995).

Administration problems:
- weaknesses in the practice of implementation, e.g. the lack of information disseminated on the temporary LIC introduced in the 1994/95 card allocation round or on the 'aggressive action' policy to target the poor;
- a failure to plan implementation sufficiently carefully to predict and offset potential problems of practice;
- poor experience in relation to the care provided which discourages some low-income people from applying for the card in subsequent allocation rounds, and deters its use by these groups even when they do hold it;
- problems with the perceived quality, access to or cost of existing public services, which deter their use regardless of whether or not people hold the LIC.

Socio-cultural problems:
- the promotion of leakage and under-coverage by local personality, political and socio-cultural influences;
- the continued preference for private sources of care because of its perceived better quality than public care;
- the potential negative influence of local health workers over allocation processes and health care utilisation;
- the multiple vulnerabilities of the low income, which deter them from receiving/applying for a card and from using it, even when they have one.

Informational problems:
- difficulties in using the income criteria at village level to determine, in a fair way, who is poorest and so eligible to receive the card.

Two other factors may also influence the effectiveness of the scheme. As the data presented in Section 6 indicate, whilst the budget available for the Medical Welfare Scheme has increased over

time it has been both inequitably allocated between provinces and insufficient to meet the costs of health care provided to the poorest. This may partially explain the provision of care perceived to be of poor quality, in turn leading to limited utilisation of available services. However, the in-depth studies also indicate that perceived poor quality is not solely related to resource constraints on the provision of care. Whilst the failure to provide 'strong' injection drugs may result from cost containment practices it may also appropriately reflect rational drug prescribing (and so imply good professional quality of care). Many other problems seem to be rooted in poor health worker behaviour and morale, in which low salaries may be a factor but which international experience suggests is likely also to be related to systemic issues such as inadequate supervision and an environment which does not promote initiative and independent decision-making. Judging the impact of resource constraints on the quality of care available to cardholders would require professional assessments of the quality of available care and of the efficiency with which the available resources are used. Both issues were beyond the scope of this study.

The final factor influencing LIC implementation effectiveness hinted at by the in-depth case studies is the existence of several benefit schemes. Utilisation data also provide evidence of the magnitude and importance of Type B exemptions. Community members certainly value the continued availability of type B exemptions at hospital level because it ensures free or reduced price access to care in times of great need, and so can even protect the near-poor from the catastrophic costs of severe illness. It may also be both easier to access and less embarrassing to use than the LIC. However, it may deter some from obtaining and using the LIC: in the communities surveyed the LIC appeared to be preferred over other 'insurance' cards.

10.2 Improving implementation of the Low Income Card scheme in Thailand

Strengthening the procedures by which LICs are allocated

The first set of problems that must be addressed are those that continue to lead to leakage and under-coverage in the card allocation process.

Improving the administration of the LIC scheme requires that:

- the MOPH must provide vision and leadership to ensure that the importance and value of the LIC is understood;
- the MOPH must play an active role in communicating LIC allocation procedures to all involved in them;
- the usefulness of the temporary LIC must be reviewed, and if it is to be continued, clearer guidelines for its allocation must be developed and appropriate 'training' given to health managers and workers;
- greater clarity should be provided over when local managers and health workers can be flexible in implementing national policy guidelines and when they cannot - to maintain common practices in some key areas (e.g. information dissemination within the population) whilst encouraging flexible and appropriate decision-making on issues where local circumstances have particular influence (e.g. eligibility);
- officials at higher levels of the health and administrative system should be encouraged to provide support to lower levels by clearly identifying appropriate patterns and practices in support visits;
- detailed monitoring and evaluation (M&E) procedures should be developed which can be relatively easily implemented, including clarity on how to feed back findings into implementation strategies;
- M&E procedures should include the use of the qualitative data collection approaches in order in particular to identify the factors undermining policy effectiveness (as this study has shown);
- data from M&E could be used to promote more effective administration, e.g. through identification of areas where there is limited or no leakage or under-coverage and rewards for responsible officials.

Improved administration may also begin to offset the negative impact of socio-cultural influences within communities, but specific steps that might offset the undue influence of either the health worker or the village headman include the difficult tasks of establishing:

- clearer and more useful guidelines concerning how to target the poor in the allocation process, to promote effective strategies at local levels;
- co-ordinated MOPH/Ministry of Interior action to support Tambon and village level card allocation committees;
- more open and plural decision-making procedures within communities.

More specifically, socio-cultural and informational problems might jointly be offset by more open procedures of identifying the poorest within communities - for example, through the use of wealth ranking methods as used in this study[33]. The disadvantages of this approach include the fact that it cannot be applied in a uniform way across the country: the poor of one community may be the rich of another, and so there is clear potential for enhancing leakage. However, its advantages include:

- flexibility and ease of use within communities;
- the potential for involving more people within each community in determining who is eligible, thus offsetting the influence of one or two individuals;
- greater potential to target the most needy within communities than formal and more stringent income criteria.

Implementing this approach would still require improved administration procedures such as relevant guidelines, the active support of higher level officials for communities, and effective monitoring and evaluation.

Promoting health care utilisation

Various factors offset the use of the LIC in accessing health care, some of which are specific to the LIC but others reflect on more general problems.

Ways of encouraging health care utilisation, particularly by low-income groups (cardholders or not) include:

- better and clearer information concerning the benefits of holding the card (such as the types of care and drugs to be received free of charge);
- speedy referral systems/practices for emergency cases (e.g. immediate access to hospitals with certain conditions);
- regular and wide-ranging supervision of local health facilities to promote the provision of good quality care and to address problems associated with health worker behaviour and attitudes;
- broader information campaigns to generate understanding of the strengths and weaknesses of different health care providers, and to encourage use (by the low income at least) of public health services.

10.3 Considering broader policy options for Thailand

Critical issues to consider

The above steps are intended to reduce leakage and under-coverage further whilst promoting greater use of public health services by all people, including cardholders. However, given the current successes of the LIC scheme, policy-makers must consider whether or not further intervention to improve effectiveness is justified. This depends not only on the feasibility and cost of the necessary measures, but also on the degree of improved protection of the low income that can be achieved. The extent to which leakage and under-coverage can be further reduced over time is simply unclear and the whole LIC experience suggests that there will always be some

[33] It will be important to assess how the use of the social guide technique since 1997 has influenced targeting practice and effectiveness.

problems. The evidence of this admittedly small-scale study points to a particularly intractable issue which must be addressed - the multi-faceted vulnerabilities from which the poor suffer. Not only are they of low income, but they:

- live in marginal areas;
- have lifestyles which make it difficult to target them;
- may be looked down on by some people;
- are subject to the whims of people in influence such as health workers and village leaders;
- suffer from socio-cultural values and practices which may lead them not to demand access to the LIC or to health services even though they are their rights.

Strengthened card allocation processes and service provision practices are simply unlikely by themselves to break through this web of vulnerability. Instead, alternative policy options are likely to be required.

Financing policy options

Rather than focusing simply on improving the LIC, policy-makers might decide to review the overall pattern of health care financing, including parallel exemption mechanisms and card schemes, and its equity and efficiency. Can that pattern be adapted in ways that will provide greater and more cost-effective protection to the poor?

There is clearly duplication in the protection available to the poorest from the LIC and Type B exemptions, whilst the wealth ranking findings of this study suggest there is also duplication between those holding the LIC and those holding cards for the elderly and disabled. Addressing this duplication might contain costs associated with the provision of care to the exempted groups but has unclear consequences in terms of improved protection for the poorest. The obvious policy response to the LIC/Type B duplication is to remove one of these two mechanisms, but the limited evidence presented here suggests that they currently work together in providing a safety net for the poorest, each making up for some of the problems of the other. Adopting Type B as the main scheme would, for example, require that some of the problems of the LIC (particularly the procedures for identifying eligibility) would need to be addressed. Abandoning Type B would, however, remove an important safety valve for the poor who currently still do not get or do not use the LIC because of the range of problems discussed. The removal of one option would, therefore, require the strengthening of the other but at the same time might also help to strengthen the remaining option. Within the LIC, a more flexible and open community-based screening might also remove the need for cards based on personal characteristics, as these would probably be incorporated in judgements of eligibility. Retaining only Type B exemptions, however, might require the continued existence of these other cards as a complementary strategy in protecting the poorest. For example, the use of Type B is associated with uncertainty concerning the level of fee reduction that will be awarded - LIC holders, however, know in advance of using services what they will be (officially) charged.

From an equity viewpoint it seems clear that the Type C exemptions which benefit groups that are not necessarily the poorest should be removed. Their existence ensures leakage of benefits to the non-poor and so may also promote (by justifying) the leakage resulting from socio-cultural influences over local-level decision-making. The removal of this exemption would, therefore, not only contribute to reducing the overall cost of the welfare scheme and enhancing effectiveness, but may also help to strengthen the LIC.

Another benefit scheme available to the poor is the VHC. Although little can be said about this scheme on the basis of this study, two points the findings emphasise are the potential problem of affordability and the potential influence of poorly perceived quality on its take-up. Although the second is a problem common to the LIC, the first is only relevant to the VHC and is rooted in the multi-faceted vulnerabilities from which the poor suffer (Russell, 1996).

A different financing strategy, reflecting aspects of current policy discussions, might be to use the LIC as the foundation for a financing approach that seeks to ensure universal coverage through registration of all people of low income, tied to the payment of a fixed amount for each registered person to the providers responsible for providing care to them. Although the earlier analysis of resource allocation flows associated with the medical welfare scheme indicates the need to review the basis of these allocations, the potential merits of a capitation approach cannot be fully considered on the basis of this study. The earlier analysis does, however, suggest that an important question to ask is whether a capitation approach would lead to more equitable allocations than the current system. In addition, this study raises critical implementation issues that would need to be considered if this overall approach were to be developed. Indeed, many of the identified LIC scheme implementation problems (section 11.1) would need to be addressed. The problems of administering the scheme, of preventing socio-cultural factors from undermining its implementation, and of developing effective and appropriate legibility criteria are all relevant to this new option - and could clearly limit its effectiveness. Given these problems and the need to consider the recommendations of section 11.2, it remains unclear whether this approach would offer greater protection for the poor than the existing LIC.

Recognising the importance of comprehensive policy reform

The socio-cultural problems which undermine LIC implementation, moreover, point to the limits of any technical solutions to the complex problems associated with the vulnerability and marginalisation of the poor. No financing policy option can, by itself, tackle these critical factors deterring the poor from benefitting from exemption mechanisms, broader financing strategies or public health care services. Real support for the poorest must come through a multi-faceted approach in which health care financing strategies are only part of a broader package of interventions. A critical element of this package must be a multi-sectoral development strategy which aims to develop, for example:

- better understanding of health needs and the pros and cons of alternative health providers;
- community supervision of local health facilities, in co-operation with professional supervisors;
- local political structures and systems that are truly reflective of the interests of all groups;
- the self-confidence of the low income in playing a role within their communities.

Critical health policy choices in addressing the needs of the poorest within Thailand

Overall, although this study has focused primarily on the LIC, it provides further evidence of the real difficulties of targeting health care to the poorest through health care financing mechanisms. It suggests, therefore, that health policy-makers in Thailand face two sets of choices in seeking to meet the needs of the poorest:

1. largely accept the status quo in relation to the LIC (though making incremental changes to address some of the continuing problems), versus radical overhaul of existing health care financing and provision policies;

2. retain a health care vision with limited consideration of the real needs of the poorest, versus using the health needs of the poorest as a rallying cry for a more effective approach to addressing their real needs.

10.4 Lessons for other countries

The Thai Low Income Card scheme provides an important example for other countries. First, as the current set of regulations have been tested through experience, they offer lessons for other countries concerning both the design of a mechanism for protecting the low income from the burden of fees, and a strategy for its implementation. The experience suggests that the key elements of 'success' include:

- a balance of central guidance and local decision-making;
- the inclusion of a range of interest groups in local decision-making;

- the establishment of clear income criteria but an acceptance that they will be used flexibly in practice;
- linking the introduction of exemptions to efforts to improve perceived quality of care, to encourage the use of the exemption mechanism in practice;
- careful planning for implementation, including training and information dissemination to health workers and those benefitting;
- detailed and specific supervision for those making key decisions in implementation.

However, second, the experience illustrates the importance of 'learning-through-doing' and of developing such a mechanism over time and in response to experience of its implementation. Lessons from Thailand may be useful in developing initial ideas for a new scheme elsewhere, but must be adapted to local circumstances and must be allowed to evolve over time. It is, therefore, particularly important to develop clear monitoring and evaluation procedures which allow both effectiveness and the problems of practice to be identified.

Thirdly, and finally, the Thai experience emphasises that there are no easy solutions to the intractable problem of serving and protecting the most vulnerable and marginalised. Even after nearly twenty years of experience, the LIC does not reach all of the poorest, and barriers to both LIC and health care use include deep-rooted socio-cultural practices. Is it enough that the LIC protects a significant proportion of the low income and that public care provides an important safety net for all? Or should public health systems concentrate on serving the most vulnerable and marginalised? Even with that goal, how could the public health system seek to reach it? And is the provision of health care really likely to address the needs of this group?

Identifying these difficult questions helps to understand the equity challenges facing health systems and to move beyond the simple view that exemption mechanisms are the answer to the potential equity problems of user fees. The discussion of the challenges and choices facing policy-makers in Thailand emphasises that meeting the needs of the poorest requires wide-ranging policy action both within and outside the formal health system.

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ANNEX 1: DESCRIPTIONS OF STUDY AREAS

In this Annex we answer four questions:
- what are the main characteristics of the communities studied?
- what signs are there of social differentiation within and between communities?
- what are the decision-making structures of the communities?
- what health care facilities are available to the communities?

Three communities were included in the local level studies: two villages in rural areas (communities 1 and 2) and one urban semi-slum community (community 3). The three were also differentiated by socio-economic status: community 1 was selected as a poor village and community 2, as a village of average socio-economic status; as an urban semi-slum, community 3 was also selected as a community of average to poor status. In the rest of this document these communities will be called COM1, COM2 and COM3.

1. Community characteristics

Table A1 summarises the characteristics of the three communities against a range of criteria.

COM1 is similar in some respects to COM2: for example, proximity to the same small town and the provincial capital; poor transport services; house ownership patterns; subsistence agriculture as the main livelihood. However, unlike those in COM2, inhabitants of COM1 perceived themselves to be particularly poor, and many villagers wanted to sell their land for money as 'a way out of poverty':

> *"Our village is the poorest in this Tambon. Our neighbouring village is much better than us. They settled here well before us. Thus, they had much better chances to get richer and larger pieces of land".*

> *"You can see 'poverty' here quite obviously immediately you are approaching the village. It is different from other nearby villages. Houses here look very poor and rice fields are very dry in the dry season and flooded in the rainy season. Nearly all of us here are poor. Just a very few are well-to-do because they own a lot of land".*

> *"Rice crop? It doesn't make any difference to have a rice field here. It is difficult to make money from growing rice. The weather has been too bad lately, too dry and too much water. Almost all farmers here have debt with at least 5 per cent monthly interest".*

This perception of the relatively low socio-economic status of COM1 is supported by consideration of the problems affecting agriculture in it. Located mainly on flat land with low-land rice fields spreading around the village, only a little land was good for cash crops, such as mung beans, corn and sugar cane. On the flat land, close to the rice fields, a few households were involved in fresh-water fish culture. Unfortunately, COM1 was largely dependent on rainwater, being served by only 3-4 privately-owned water pumping stations, and also suffered from both drought and floods. In contrast COM2 benefitted from a greater range of water supplies and flooding appeared to be less of a problem than in COM1. COM2's water supply also appeared to be better controlled: private pumping stations were more common, and government irrigation projects delivered water through concrete irrigation canals and through electric pumps situated by the nearby river. The researchers also felt that COM1 benefited from richer soil quality for rice farming.

Table A1: Main characteristics of study sites

CHARACTERISTIC	COM1	COM2	COM3
socio-economic status	poor	average	poor to average
location	rural 24 km from Phitsanulok 13 km from nearest small town	rural 17 km from Phitsanulok 13 km from nearest small town	urban semi-slum within provincial capital
main village features	located on flat land; connected by all-season dirt road and paved road to nearest small town; no reliable bus service; houses built away from road; houses connected by walking paths; shops by road side	divided by river; connected by all season dirt road and paved road to nearest small town; no reliable bus service; most households on same side of river but a few on the other side	situated between 2 main roads; concrete road runs through it; houses built near road
house ownership	mostly self-owned	mostly self-owned	mostly rented
population size	102 households	163 households	104 households
population characteristics	mostly older people & children	mixed age range	mixed age range
income sources	subsistence agriculture (rice farming) cash-crops (mung beans, corn, sugar cane) fresh-water fish culture remittances from migrant workers	subsistence agriculture (rice farming) cash-crops (soya beans) remittances from migrant workers	very varied e.g. tricycle riders street vendors government officials

As a consequence of limited income earning opportunities within both villages, many people moved to work in the provincial capital, other large towns, and even Bangkok. Most of the out-migrants were fairly young, aged between 16 and 30 years and found employment as construction workers. They remitted money to support their families who remained in the village:

> *"Most of them visit home once in 3-5 months. They come back and stay with their family during rice growing seasons to help their parents with farming work. People older than 30 years tend to live permanently in the village. Working as a construction worker, to a great extent, is considered good and is popular among younger people. When you are old, where else is better than your home town"* (Interview, COM2).

Some migrants from COM1 had even travelled to Taiwan in search of jobs: at the time of study only about 10 villagers, both men and women, were still working in Taiwan. Many more had previously but the numbers working overseas had declined because of the large initial costs involved: approximately 70,000 Baht had to be paid to a broker company which arranged for jobs for the workers. It was common, as in other rural communities in Thailand, for those leaving to work abroad to put themselves into debt initially, paying off the debt through monthly repayments. One worker in COM1, for example, was said to have sold part of his land for this purpose.

The extent of out-migration from COM1 was indicated by the number of empty houses: according to one respondent about twenty houses were left empty due to out-migration. An old lady reported that:

"The [house] owners left for Bangkok to make money as food vendors a couple of years ago. They had no choice here due to the very bad rice crops caused by both droughts and floods. It is, however, lucky for me as an old woman who cannot work the land any more, because they have hired me to look after their house. This is the only income I can make now".

The out-migration from COM1 had an impact on the age structure of the village population. Workers moving to large towns for jobs often took their family, especially spouse and teenage children, with them and left younger children, even babies, with their grandparents who continued to live in the village:

"When we are old, we have nowhere to go for work. The only thing we can do is to stay home taking care of our grandchildren, and waiting for remittances from our children who are working in Bangkok" (Old man, COM1).

In contrast, more younger people lived in COM2, some commuting to work in the provincial capital.

Other characteristics of COM1 suggest a variety of social problems, which may partly explain, or result from, its poverty. Asked why COM1 was poor, an old man explained that:

"People here are strange. They work only when they want money. But, once they get some, they quit, and use up what they earned. Then, they start working again. The worse thing is that they, men and women, not only drink and gamble regularly, but they are also lazy and want to show off that they are rich by building a 'good looking house'. They are even willing to jump into debt or sell part of their land just to be seen as rich, living in a good house".

In contrast, villagers in COM2 appeared to be more diligent, and careful with their spending. There were no reports, for example, of drinking and gambling and because of better land and irrigation facilities, villagers were more likely to be able to make a reasonable living from farming.

COM3 clearly differed from the other two study sites because of its location in an urban area. It has been identified by the municipality as a target area for development purposes because it was relatively poor and its relative poverty could be seen in its housing and environmental circumstances. Although those houses located along the main 'road' were relatively well built, others away from the road had old, poorly maintained wooden walls and galvanised iron roofs. They were located on muddy ground which was often flooded with smelly water, especially in the rainy season. Most people in COM3 also rented their houses. Just before the study was launched, more than 20 houses were taken from the community for land development projects - emphasising that housing tenure and security are vulnerable, making life and livelihood difficult to plan.

Although most of the population had come to the area from somewhere else, they had mostly lived in COM3 for long periods and did not perceive themselves as temporary residents. Some had lived in the community for around 20 years without official registration. For example, the family of a tricycle rider who was interviewed had unofficially moved from a nearby province two years previously. Asked why they did not register to live in COM3, the wife said: *"It is too difficult. It might be because we don't know how to deal with official things."*

Unlike people in the two rural villages, residents in this community held various occupations, sometimes at the same time. The tricycle rider said:

"I would do anything legal to earn my living. After I finish with my daily tricycle job, I sometimes work as a passenger truck driver. In the morning, my wife goes house to house in this neighbourhood to collect laundry since she earns money from doing

laundry for them. She gets just 300 Baht a month from doing laundry for a household of around 3-4 people. Not much money, but what else can she do? She earns about 2,500 Baht a month from her laundry job".

His two sons, aged 19 and 14 years old lived with him and his wife. The eldest, who had dropped out of school, was said to suffer from 'rheumatism' and worked on and off, sometimes as fruit-truck driver. The youngest helped the mother with laundry work.

There were also some wealthier people in the community. Although actually living with her children in Bangkok, a 'wealthy' retired school teacher still owned a large plot of land in the community and her well-built, Thai-style, wooden house was looked after by an old lady. As she had both houses to let and a pension, she was considered wealthy and was also well respected by her fellow community members. It was noteworthy that people, particularly in COM3 but also in the rural areas, perceived that those working as government officials were rich because they had a 'stable' income.

Table A2: Characteristics of households in different wealth groups

COMMUNITY	RICH	MEDIUM	POOR
COM1	**(defined as 'Mee', 'having')** • land owner (more than 80-100 rai) • money to lend (100,000 Baht or more in savings) • owning a pick up truck; agricultural lorry (6 wheels), small tractor • having a salary • having a small rice mill and doing business	**(defined as 'Por Mee Por Gin')** • land owner (60-70 rai) • cash crop farmer (rice, maize, mung beans) • have small piece of land (maybe only just land for house) but get remittances from children • receiving remittances from children (e.g. working in Bangkok or even Taiwan) • having children working as government officials • structurally sound house (wood) • wage earner, industrious, thrifty and has house	**(defined as 'Jon')** • general worker; • no land or own only limited land (10 rai or less) • may be able to own enough land for a house • old and live alone • temporary worker?
COM2 (note: households both sides of the river were ranked)	**(defined as 'Ruay')** • having a lot of cash: e.g. one case of over 500,000 Baht in cash (savings in bank) • money lender • land owner: had 'thousands' of rai (one extreme case where owned 1000 rai, a health worker at provincial level) • own a big house, with household consumables e.g. electricity, TV, fridge, sofa • no debt • good farm output/yield which generates good money: e.g. 40,000 Baht per rai.	**(defined as 'Pan klang')** • having your own land; • having enough money to support your household; • big house • capable (physically, practically and mentally) • government official (e.g. a village teacher; or work in nearby town) (implication is regular salary, social status) • big land holding but not necessarily cash • having enough money, and having enough to eat • widow, but with support from children	**(defined as 'Jon')** • landless or owns only very distant and cheap land • agricultural labourer • worker e.g. in construction and likely to work outside the village • no possessions or assets • have to borrow money if wish to invest/farm (seeds, fertiliser) • *"earn in the morning, eat in the evening"* i.e. your food has to be earned daily • chronic sickness, physical or mental (too weak to work) • old - cannot work, and no money sent from children • not clever • widow without childrens' support
COM3	• land/house owner (land in that community) • rent that house/land • educated (teacher) • regular salary • spouse or children with regular salary (e.g. government official) • several household members working • owning a shop • can support others • having own business • having a car/pick-up truck • remittances • coming from a wealthy family • good immediate environment: tidy surrounding • healthy	• rents house but has regular income • receives remittances e.g. poorly paid tricycle rider who gets remittances • owns a house to rent, which provides a regular source of income, and can do other work to supplement	• no land - for your house, or elsewhere - have to rent • no salary • rent housing (of poor quality) • poorly repaired/maintained house • no savings • cannot work • old • bad health • drink too much • lazy/workshy • when he has money he stops working, spends it, and then starts working again, does not invest savings

2. Social differentiation

Table A2 identifies the criteria used in each village to determine the relative wealth of households. They supplement the information on income sources presented in Table A1 and indicate that people within communities clearly perceive that there is social differentiation within them. The criteria also appear to provide some support for differences in the relative wealth of the rural villages as the size of landholding or level of savings used to determine wealthy status is lower in COM1 than COM2. They also show major differences in the general circumstances of the urban community (COM3), as compared to the rural villages.

Across villages these criteria emphasise the importance of land-owning as a source of wealth - allowing farming in rural villages (as indicated in Table A1) but generating rent in the urban community, as one of a greater range of income sources than indicated for rural communities (again as indicated in Table A1). Additional criteria applied in determining the rich/middle income groups include the receipt of remittances and having a regular salary (e.g. being a government official).

Interestingly, for all communities it appears that, the poorer the household, the more personal characteristics are used in determining relative wealth. Thus, the criteria used to determine the poorest group across communities included sickness, being old, being not clever, drinking too much and not being able to save. These personal characteristics supplemented criteria like not having land and having only poor land. Taken together these criteria emphasise the marginalisation of the poorest group in each community - not only do they earn less than others but they are 'different' in who they are and how they live.

In all three areas it was considered possible to move between categories - if you work hard; if you have good luck; if you are wise. Thus, if you are poor but intelligent, you can climb up the economic ladder, but if you are not clever, you are likely to stay poor. You can also fall down the ladder; for example if you have land and then sell it without investing the money wisely, you may end up having to rent land.

3. Community decision-making structures

All rural villages within Thailand have similar decision-making structures at village level and Tambon level. At each level there is a committee, headed by the village head at village level and the Kamnan at Tambon level, which should consider all matters before making decisions.

A major difference between the two rural villages was the nature and performance of their village headmen. The village head in COM2 had been a resident for 20 years, and was a strong character who was influential in decision-making in all village matters. Apart from one other person, an 'expert', most committee members seemed very quiet in the meeting with the head that the researchers observed. Even though the head tried to encourage them to share their ideas, very few spoke, and usually only to support those points raised by the village head. He also appeared to be determined to bring better life to the village. As a committee member said in a personal interview:

> *"Although I did not totally agree with the head in some points, I did not want to say anything against him because he is well-informed, clever, helpful, and devoted to his fellow villagers. I was not sure if what I was thinking might be well thought of compared to what he proposed or suggested. I also think that what he is doing to the village, he means to do good. I, then, had better keep quiet".*

Despite being a native of the village, the COM1 village head did not appear to the researchers to be as active or as determined to improve living standards in the village as the COM2 headman. He was rather quiet and, although any official information from higher administrative levels was

directed to him, was not well informed even with respect to village matters for which he was responsible. This could obviously be seen in a focus group meeting with the village committee in which the head hardly spoke unless directly addressed, and in other discussions he admitted that he did not remember which committee member was appointed for what function. In practice, village committee meetings were rarely held in COM1. A female interviewee said that:

> *"He (the village head) was elected because he was lucky. At the time of election, very few men were staying in COM1. So many men had left for work somewhere else outside the village. He was, then, seen by the villagers as a young candidate who deserved the title. We, however, have made a wrong choice".*

As an urban community, there were no local-decision-making processes within COM3 and decisions concerning the community were made at municipality level.

4. Access to health facilities

Table A3: Health facility access by community

	COM1	COM2	COM3
PUBLIC	• Tambon health centre located close to road running through village • district hospital in district headquarters (13 km away)	• Tambon health centre located on side of river with most population • district hospital in district headquarters (13 km away)	• no public facility within community • regional hospital within walking distance • municipal health centre quite far from community • health volunteers
PRIVATE	• shops within community • injectionists within community • health volunteer working privately close by • pharmacies and private clinics in towns • traditional healers, herbalists	• shops within community • injectionists within community (especially Krat minor) • health volunteer working privately close by • pharmacies and private clinics in towns • traditional healers, herbalists	• shops within community • private hospital and 2 private clinics close by • pharmacies close by • traditional healers, herbalists

As Table A3 indicates, a Tambon health centre, the lowest tier of the government health system, is located in each of the two rural villages included in this study. It is a primary care facility offering simple treatments for minor illnesses, preventive and promotive health services, particularly for mothers and children, and sanitation and communicable disease control services. The health centre in COM1 has four staff members (one auxiliary midwife, two auxiliary health workers and one nurse practitioner), whereas the COM2 centre has only three (one auxiliary midwife, one health worker, and one nurse practitioner). It is important to note that the COM2 health centre is located on one side of the river cutting through the village: the majority living in COM2A (158 households), where the facility is located, thus, have much better access to it than those in COM2B (only 5 households). A variety of private health care facilities and providers were also said to offer services within, or be used by, people in these communities. The injectionists, for example, who are locally called 'Mo Cheed Ya', travel by motorbicycle and visit people in their homes. Villagers indicate their need for the injectionists by putting up a home-made flag, a wooden stick covered by a plastic bag, on the pathway near their houses. On average, the fee for one injection is 80 Baht, slightly less than the daily minimum wage of the time, 110 Baht.

Rural villagers also reported using health care providers based in the district headquarters, around 13 kilometres from each village. A 30-bed government community hospital, staffed by some

medical doctors, one dentist, nurse-midwives, and some auxiliary health and dental workers, is located there, as well as private clinics, traditional and modern drug stores, a local health volunteer and a drug cooperative.

Unlike the two rural villages, no formal medical facility was available directly within COM3. However, a well-known private hospital, and a couple of private clinics were located close to the community and the regional hospital, a 1000-bed hospital staffed by general practitioners and specialist doctors, as well as a full complement of other health personnel, is also within walking distance. Unfortunately, the public health facility through which the population is supposed to be referred to the regional hospital, the Municipal Health Centre, is the most distant from the area. As a result, it was largely accepted that patients would go direct to the regional hospital when they were sick. Elderly people received particular support from the provincial social welfare programme. An old woman looked very happy when she mentioned this programme:

> *"Once a month I am picked up by a minibus sent out by the Municipality to get old people like me for physical exercises. We sing, play and do all physical activities as well as get medical check-up free of charge. I like the programme very much".*

Finally, although little discussed, it appeared that traditional practitioners of various kinds were located in each community and some people from all sites sometimes use both government health facilities and traditional healers located in other provinces.

Key findings concerning study areas:

- there is some social and economic differentiation between and within the three communities studied;
- the urban community has quite different characteristics from the two rural communities;
- the poorest not only have less income than others but are also marginalised from the rest of their communities in social terms;
- each community has reasonable access to a range of public and private health care providers.

ANNEX 2: DETAILED DATA ON VARIATION IN REGIONAL POVERTY

Figure A1: Regional variations in GDP per capita, 1988

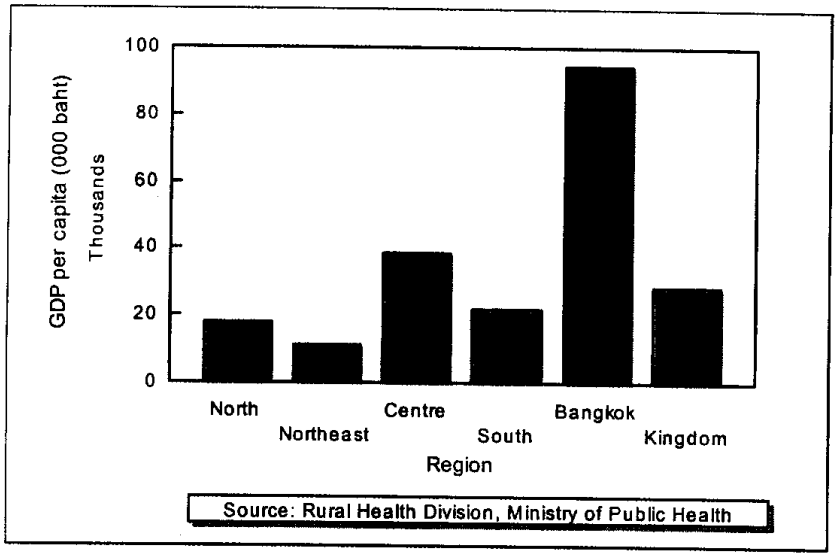
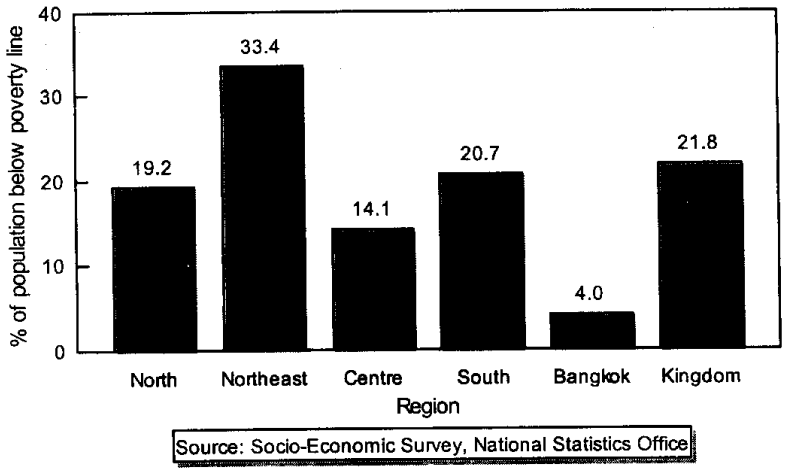


Table A4: The regional distribution of poverty in Thailand, 1988

Region	Number of Poor (000's)	Regional poor as % of national poor
North	2,132.5	17%
Northeast	6,664.0	54%
Central	1,886.1	15%
South	1,470.9	12%
Bangkok	2,80.0	2%
Kingdom	12,433.5	100%

Source: National Statistics Office

Figure A2: Regional variations in poverty incidence, 1988



Source: Socio-Economic Survey, National Statistics Office

Table A5: Regional variations in GDP per capita, 1995

Region	GDP per capita (Baht)
Bangkok	212,278
Northeast	24,834
North	34,565
South	47,947
East	109,738
West	52,885
Central	64,896
Kingdom	70,754
Source: NESDB, National Accounts Division	

Table A6: The regional distribution of poverty, 1996

Region	Number of Poor (000s)	Regional poor as % of national poor[a]
North	1,605.5	15.6
Northeast	6,104.5	54.9
Central	860.8	8.4
South	1,625.7	15.8
Bangkok	85.1	0.8
Kingdom	10,281.6	100
Note: (a) Estimate from Socio-Economic Survey, National Statistics Office Source: Ministry of Public Health, National Insurance Office		