CHAPTER 2

RESEARCH METHODOLOGY

1. Types of Study

This study is a descriptive study for identifying potential health insurance schemes to expand to the currently uninsured population through evaluation of the existing insurance schemes in Thailand based on the quantitative secondary data as well as the qualitative data obtained by the Delphi Technique. The study attempts to learn what elements in the context have contributed positively or negatively to the outcome.

2. Source of Data

2.1 Quantitative Data

1) Data on socio-economic indicators
   - collected from World development report of World Bank
   - annual reports of Ministry of Public Health.

2) Data on health expenditure
   - issued by Social Development Project Division of the National Economic and Social Development Board.

3) Data on source of health care financing
   - issued by Health Planning Division of MOPH.

4) Data in relation to the civil servant medical benefit scheme
   - Statistics of Civil Servant, Office of the Prime Minister, and annual reports of Ministry of Finance.

5) Data in relation to the free care for the low income household and the elderly
   - surveys and studies done by the Rural Health Division of MOPH.

6) Data in relation to the Workmen Compensation Scheme and the Social Security Scheme
   - Labor Studies and Planning Division, Department of Labor Protection and Welfare, and
   - annual reports from the Workmen Compensation Office and Social Security Office.

7) Data in relation to Health Card Program
   - surveys and studies done by MOPH.

8) Data in relation to Private Insurance
   - surveys and studies done by professionals in Ministry of Commerce or universities.

2.2 Qualitative Data

1) Delphi Method is used for obtaining the judgements and opinions of a group of 10 to 15 experts on evaluation of the schemes.

2) Opinions, critiques and perspectives on potential schemes are obtained by the in-depth interviews to scholars, experts in SSO, MOPH.

3. Study Steps

3.1 Examination of Existing Health Insurance Schemes in Thailand.

After briefly reviewing socio-economic characteristics of Thailand (including demographic profile, economic performance, income distribution, education level, morbidity

and mortality pattern), an examination of the existing health insurance schemes is made.

The existing 8 schemes are:

1) Civil Servant Medical Benefit Scheme
2) Free Medical Care for the Low Income Household
3) Free Medical Care for the Elderly
4) School Health insurance
5) Workmen Compensation Scheme
6) Social Security Scheme
7) Health Card Program
8) Private Health Insurance

Each scheme will be examined in terms of the following items:

1) objectives
2) target populations and its coverage
3) source of finance
4) total and per capita expenditures
5) form of payment to providers
6) benefits
7) providers
8) management

3.2 Equity and Efficiency Criteria Setting

Criteria is set for evaluating the schemes under equity and efficiency considerations. One important criterion of equity dealt with is the growth of population coverage.

Considering the concept of equity and efficiency and the related literature, the researcher sets the following criteria of equity and efficiency out of which 8 questions on equity and 9 questions on efficiency are elaborated:

Table 3. Criteria of Potential Schemes

I. Equity 1. possible growth of coverage 2. per capita beneficiary expenditure for the scheme 3. progressiveness in premium & benefit 4. access to service 5. quality of care
II. Efficiency 1. stability & utilization of fund 2. risk pooling (adverse selection) 3. cost containment 4. moral hazard 5. managerial efficiency 6. consumer choice of service

3.3 Evaluation by the Delphi Technique

The researcher uses the Delphi Technique to identify a potential scheme. The Delphi Technique was developed as a method for obtaining the opinion of a group of experts on a particular matter without requiring time-consuming meetings. It is applied especially,

> When accurate information is unavailable or expensive to obtain, or evaluation models require subjective inputs to the point where they become the dominating parameters. A good example of this is the "health care" evaluation area, which currently has a number of Delphi practitioners[4].

The experts are kept separate and asked not to confer. The researcher contacts each expert and delivers

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[4] Linstone, H. & Turoff, M. 1975. The Delphi Method: Techniques and Applications. p. 10.

questionnaires. The experts return the questionnaires by mail and the researcher tallies the results. This is the first round. The Delphi Method usually runs the second or third round of responses to obtain the most reliable consensus of opinion from a group of experts. However, because of the time constraint, the researcher conducts only the first round survey.

Among the existing 8 Schemes, the researcher selects three schemes for evaluation by the Delhpi Technique [5]:

1) Free Medical Care for the Low Income Household (LIC)
2) Social Security Scheme (SSS)
3) Health Card Program (HCP)

Group of Experts

The criteria for selecting experts are:

1) An expert should be knowledgeable in the 3 schemes;
2) An expert should be able to make a judgement based on his/her knowledge, experience and ethical considerations.

Ten to fifteen experts who seem to meet two criteria above are selected from academics, SSO and MOPH.

Conducting Delphi survey

The Thai version of questionnaire is drafted and approved by the advisors. A cover letter is attached to a questionnaire [6]. A stamped-envelope marked to the attention of the researcher is also included for return. The sets of questionnaire are delivered to the 12 experts by a personal visit of the researcher.

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[5] The reason of this selection will be explained in section 4 of the chapter 3.

[6] See appendix 1 and 2 for the cover letter and the questionnaire in Thai and English.

In the questionnaire, each question will be answered by giving a score between 1 and 5 approval rating.

1 means the lowest or least,
2 means low or small,
3 means uncertain or unable to give an opinion,
4 means high or large
5 means the highest or largest.

The responses are to be returned to the researcher by mail. The results are processed into tables for further discussion.

3.4 Identification of the Most Equitable and Efficient Scheme

To identify the most equitable and efficient scheme from the result, while at the same time considering the scheme's possibility for growth of coverage. Discussion is made on major advantages and disadvantages of potential schemes.

4. Questions on Equity and Efficiency

According to the 5 criteria of equity and the 6 criteria of efficiency, 8 questions regarding equity and 9 questions regarding efficiency are elaborated. The meaning of each criteria and elaborated questions are as follows:

Equity Criteria

1) Possible growth of coverage

Expanding population coverage is one of the equity goals. It is possible to assume that the larger a scheme's population coverage, the more equitable a scheme is. The

possible growth of coverage means that a scheme has the potential to increase the number of beneficiaries in the uninsured group if demand and financing supply (budget)are considered.

Q 1.1 Do you think the scheme has potential of increasing coverage to the uninsured population?

Q 1.2 Do you think the budget and finance for the scheme shows an increasing trend?

2) Per capita beneficiary expenditure for the scheme

In Mooney's definition (1986), equal expenditure per capita (equal amount of money is spent on each individual in the population) is one of the indicators of equity. Variations in expenditure per capita on health care can be separated into differences in the likelihood of receiving care and in the cost per patient of the care given. Per capita beneficiary expenditure of LIC, SSS and HCP (an average spending of a beneficiary on health care) is an appropriate measure of equity.

Q 1.3 Comparing three schemes, do you think per capita beneficiary expenditure is equitable?

3) Progressiveness in premium and benefit

As for the amount which people pay (premium) should be proportional to their ability to pay. The high income group can pay higher premium than the lower income group. However, the amount (degree, quality) of benefit should not necessarily be proportional to their ability to pay. It should be given in proportion to one's need regardless one's ability to pay. If the benefit is progressive, the higher income can receive higher benefit than the lower income. However, the lower income should be guaranteed the equal benefit as the higher income especially regarding the primary care.

Q 1.4 Do you think the price of premium is progressive?

Q 1.5 Do you think the benefit is progressive?

4) Access to services

Equal access requires a fairly even distribution of health facilities and practitioners across all regions. The access to the service is affected by such factors as price of care, distance to health facilities, transportation cost, consumers' tastes, and opportunity costs. The access is also affected by understanding and appreciation among insured persons about their rights under a scheme.

Whether the access to health services for people under a scheme is adequate or low, and whether people are aware of the available benefits from a scheme will be asked.

Q 1.6 Do you think the access and use of health services under a scheme is equitable between the high and low income?

Q 1.7 Do you think that the beneficiaries under the scheme are fully aware of their entitled benefits?

5) Quality of care

One of the indicators of quality of care is the type of health facility visited. The other is consumer satisfaction with the service. Among hospitals, clinics, health centers, dispensaries, and pharmacies, hospitals which are equipped with trained health personnel, enough materials and drugs are regarded as facilities of high quality of care. Public hospitals run evening clinics which contribute to satisfying consumers' needs. However, in some public hospitals, services are rationed by limiting supply which results in long waiting lines and poor quality.

Entitlement to the minimum health package is also an indicator of quality of care provided under certain schemes.

Ambulatory care and inpatient care for sicknesses and injuries, and delivery expenses are usually provided as the minimum health package. Some schemes provide medical examination and preventive/promotional care for maternity as the benefit package.

Q 1.8 Do you think the quality of care which is provided to the insured is satisfactory?

Efficiency Criteria

1) Stability and utilization of fund

The source of finance varies with each scheme: general tax revenue; household income; and contributions. Whether the source of finance is stable without fluctuation or deficit, and whether the fund is used efficiently will be asked.

Q 2.1 Do you think that the source of finance is stable and sufficient?

Q 2.2 Do you think that the use of fund is efficient?

2) Risk pooling (adverse selection)

Whether risk pooling is high or low depends on the number and characteristics of beneficiaries. Pooling risks of large number of people including the rich and the poor, and the healthy and the sick, can guarantee the financial viability and economy of scale can work effectively. If more people with higher risk of illness join the scheme and people with lower risk are not likely to join it (adverse selection), the financial viability becomes low.

Q 2.3 Do you think that risk pooling in a scheme works widely and efficiently?

Q 2.4 Do you observe a likelihood of adverse selection in a scheme?

3) Cost containment

The rate of increase in health expenditure has been rising faster than the rate of increase in per capita income. As the government and consumers find health expenditure taking a larger share of their income, they should be aware of the importance of controlling the rate of increase.

The cost sharing mechanism can control cost escalation:

a. Deductibles; a set amount which the beneficiary must pay before receiving insurance benefits.
b. Co-payment; the amount of the charges for specific services which insurance does not pay, excluding the deductibles.

Q 2.5 Do you think that there are any cost containment mechanism such as cost-sharing and some other mechanisms in a scheme?

4) Moral hazard

Insurance mechanism often alters the economic constraint on both patients and providers. Since treatment costs are paid by the insurers, patients become less price-conscious and providers become less economic and morally restrained on charging higher prices as well as requiring frequent visits by patients. This condition causes over consumption and over-treatment. The impact of moral hazard depends not only on demand factors, but also on the availability of supply and the response of providers.

Q 2.6 Do you observe the likelihood of over-consumption and over-treatment in a scheme?

5) Managerial efficiency

The financing body (insurer) must deal with managing operation effectively. The financing body reviews claims, monitors utilization, and pays for services.

Whether the financing body (insurer) and providers have to do any complicated managerial work will be asked.

Q 2.7 Do you think that management of the financing body is done efficiently?

6) Consumer choice of service

Under some schemes, consumers can freely choose providers (both public and private outlets) when seeking health services. However, some other schemes require consumers to visit hospitals with which the scheme contracts. If the contracted hospitals are not located near consumers' work place or residence, consumers tend not to attend the contracted hospitals but to visit nearer hospitals or clinics. Moreover, consumers sometimes have to follow a complicated procedure to have their payments for services reimbursed. Whether consumers can freely choose any health care outlet will be examined.

Q 2.8 Do you find that consumers have the freedom to choose clinics and hospitals?

Q 2.9 Do you think that consumers have to follow any complicated procedures or formalities to benefit by a scheme?