CHAPTER II

Literature reviewed

The study of factors influencing the drop out or discontinued enrollment in health card holders was done before by some researchers. The study was different in the purpose, the method of study and the benefit from the results. Reviewed of literatures in this chapter would examine into 3 parts:

1. Theoretical background
2. Background of the Health Card Program
3. The related studies

Theoretical Background

Most people can neither afford to pay the full costs of their medical treatment when they become seriously ill, nor can most people afford a loss of income when they are physically unable to work. In some countries, such as the United States and Canada, most people are covered by some form of health insurance to help them bear these financial losses.

There are two distinct types of health insurance coverage (Long et al., 1988):

Medical expense coverage, which provides benefits for the treatment of sickness or injury.

Disability income coverage, which provides income benefits when the insured is unable to work because of sickness or injury.

Health insurance coverage may be provided through private insurance companies, for example, Blue Cross/Blue Shield plans, self-insured groups and health maintenance organizations (HMOs), and also government programs. The ways in which the health insurance benefits - both medical expense and disability income - are provided varies substantially according to the coverage terms specified by the provider. However, the type of benefits provided by each kind of coverage remain fairly constant regardless to the source of the coverage.

This present study under consideration on medical expense coverage program, will concentrate only on the medical expense coverage.

The medical expense coverage program is designed to provide benefits to help the insured to pay for the costs of receiving medical treatment for a sickness or an injury. Several types of medical expense coverage are available; the specific benefits available to an insured depend on the type of medical expense coverage which he has chosen. Five types of medical expense coverage, commonly available in general health insurance, will be examined.

1. **Hospital-surgical expense coverage** provides benefits related directly to hospitalization costs and associated medical expenses incurred by an insured for treatment of sickness or injury. Most hospital-surgical expense cover:

. Hospital charges for room, board, and hospital services
. Surgeon's and physician's fees during a hospital stay
. Specified outpatient expenses
. Extended care services, such as convalescent or nursing home costs

2. **Major Medical Coverage** provides benefits for the same types of medical expenses that are covered by hospital-surgical expense. In addition, major medical coverage provides expenses that may not be covered under basic hospital-surgical plans, including the costs incurred for:

. Receiving outpatient treatment
. Employing private-duty nurses
. Renting or purchasing treatment equipment and medical supplies
. Purchasing prescribed medicines

3. **Social Insurance Supplement Coverage** provides benefits for specified medical expenses not covered by government health insurance.

The benefits available under Medicare in the United States and under the provincial government programs in Canada will not cover all the medical expenses an insured may incur, therefore, private insurance companies and Blue Cross/Blue Shield plans offer Social Insurance designed to supplement the coverage provided under government programs.

4. **Hospital Confinement Coverage** consists of a predetermined flat benefit amount for each day an insured is hospitalized. The amount of the daily benefit is specified in the policy and does not vary according to the amount of medical expense the insured incurs. This type of coverage is available only from private insurance companies.

5. **Specified Expense Coverage** provides benefits to reimburse the insured for expenses incurred by:

. Obtaining treatment for an illness that is specified in the policy
. Purchasing medical supplies or treatment that are specified in the policy

The most commonly offered forms of specified expense coverage include dread disease, dental expense, prescription drug and vision care coverage.

The following will describe the various providers of health insurance in the United States for viewing the operation and types of coverage available through other health insurance providers beside private insurance companies.

Blue Cross Plans provide hospital care benefits to their subscribers essentially on a "service-type" basis. They cover hospital services, including the expenses of room and board as well as the costs of using the hospital's other facilities. If the hospital or an other health care facility is not a participating Blue Cross member, Blue Cross will pay only a specified percentage of that nonmember facility's fees, and the subscriber must pay the difference.

Each Blue Cross plan operates only in a specific geographic area. Subscribers who move out of the area served by their Blue Cross plan cannot continue their membership. However, each Blue Cross plan permits individual Blue Cross subscribers who move into an area serviced by a different Blue Cross plan to transfer their coverage to the Blue Cross plan in the new area.

Blue Shield Plans provide medical and surgical expense benefits for their subscribers. Like Blue Cross plans, Blue Shield plans are available on both a group and an individual basis.

In some locations, the Blue Cross and Blue Shield plans are combined, while in other locations they are operating independently from each other.

Health Maintenance Organizations (HMOs) provide a form of prepaid health care to subscribing members of the plan. Individuals and groups who subscribe to the HMO by paying dues are entitled to use the medical services and facilities of the HMO's participating physicians and hospitals. As with Blue Cross and Blue Shield plans, each HMO operates in a specific region, and benefits vary among the various HMOs. However, all HMOs encourage members to practice preventive health care by providing benefit for regular physical examination and other preventive care, as well as benefits for the treatment for mild ailments, such as colds and flu. In contrast to HMO, most private insurance companies and most Blue Cross and Blue Shield plans exclude physical examination and preventive care from coverage under both their individual and group plans.

Consumer Behavior Theory

Scientific knowledge of consumer behavior is based on the theory of choice. It is needed as a basis for formulating and implementing marketing activities. In another word, consumer behavior is the basis for developing strategies to influence individual's purchase and choice of consumption.

The literature of consumer's behavior yields a variety of comprehensive models. Some of the models that have been developed are presented as background information for this present study.

The Howard Model

The first truly integrative model of buyer behavior was proposed by John Howard in 1963 (Howard, 1973). Howard introduced the useful distinction between true problem-solving behavior and automatic response behavior.

This model behavior begins with a felt need or drive represented as a goal. The individual is attentive to some triggering which indicates that some alternatives will satisfy the aroused drive. The triggering activates the process of choice, which, in turn, is profoundly affected by a state of predisposition to buy the product under consideration. If this predisposition is low, then the information search is activated from both personal and impersonal sources.

The concept of predisposition is used to refer to a latent attitude about the utility of an alternative to satisfy the drive. It is affected by post decision evaluation, the more favorable the experience with the alternative in the past, the greater the likelihood that it will be purchased again.

All cues engage, Howard calls perceptual bias. This means that the process of perception can be distorted by individual's attitudes. Notice also that various dimensions of alternative products are spelled out (such as service and price), for each dimension may be psychologically important to the buyer in different ways.

A purchase is the final result when sufficient information is gathered to permit a selection with some confidence. The results of this action then become stored in memory as post-decision evaluation and become relevant for future decisions.

In an automatic response to behavior, alternative evaluation disappears altogether because the predisposition to buy is so strong that only one alternative receives consideration.

Consumer behavior is adaptive in nature: consumers adapt to the situations that surround them. Being influenced, in turn, means that a consumer's decision process has been affected by outside forces. Many external sources act to influence consumer behaviors. Each is briefly described as follow:

Culture refers to the beliefs, values, and view the consumer share as members of a society. Within consumer behavior, one role of culture is to identify boundaries for what we see as acceptable products, services, and consumer activities.

Subculture refers to groups of people, within a entire culture, who tend to share particular patterns of values and behavior. Subcultures are defined on bases such as sex, race, age and religion.

Social class, incorporates variabilities such as occupation, income, and education level. These variabilities combine to affect life-styles, which have great influence on consumption patterns.

Family has a strong influence on consumer behavior through values, consumption style and post experiences which have been internalized.

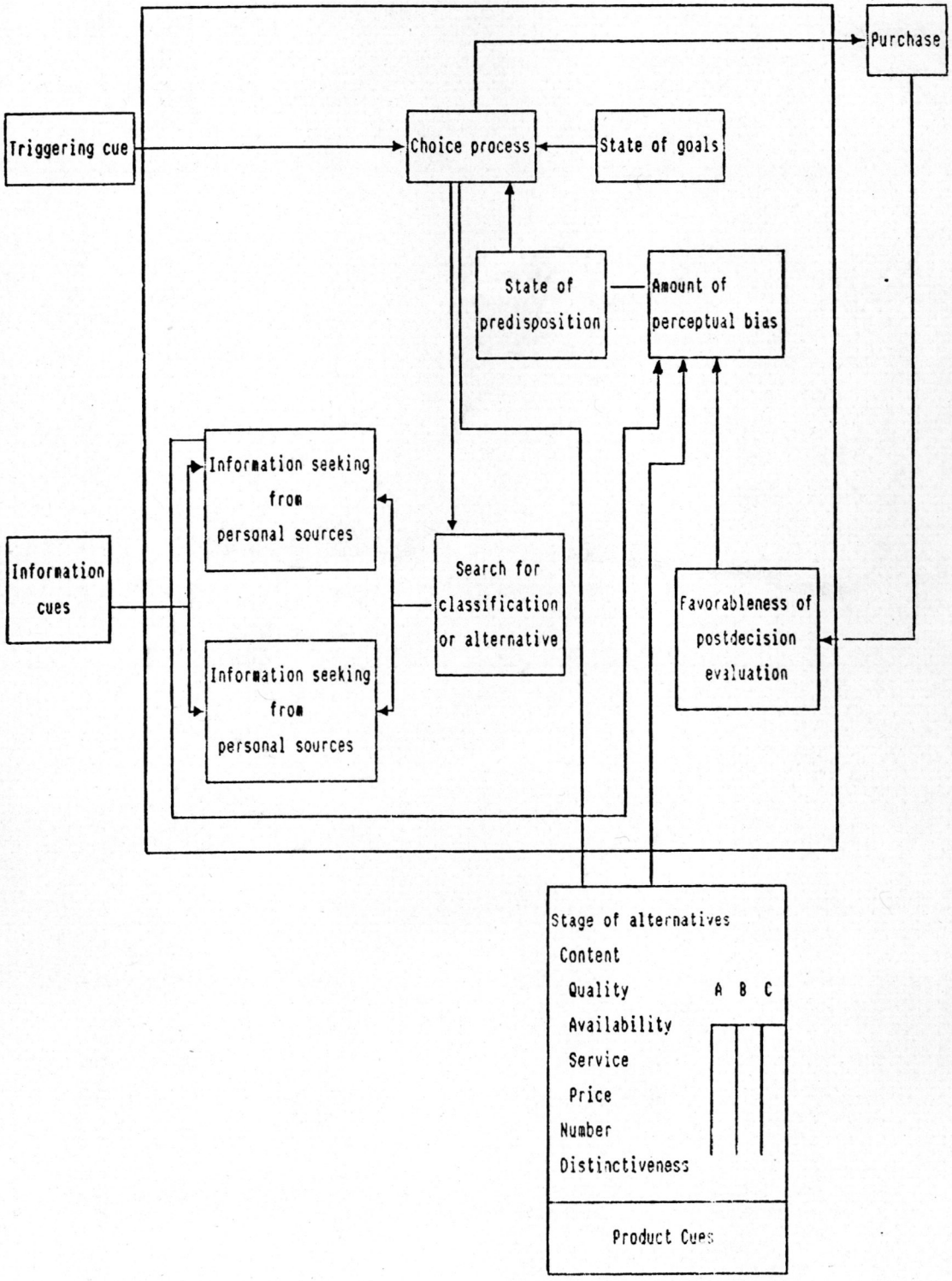
Reference group and friends influence consumer behavior by providing guidelines to appropriate behavior for those people who identify with them. The influence of friends, the consumers are also frequently influenced by observing their behaviors and their reactions to the consumers' purchase.

External conditions refer to such factors as unemployment, lack of money, long-term illness, and so forth. External conditions clearly the affect of many consumers' decision on how much to spend and when to buy or not to buy a given product or service.

The marketing environment is a significant source of influence. There are numerous efforts to influence consumer's decision. These efforts include attractive products and service characteristics offered for sale, salespersons, price, and location of the sale's place.

***Finally,* Situational effects** refer to temporary forces that stem from particular setting or contexts. Consumer behavior will adapt to the situational context. For example, selling health card during harvest season the rate of buying may be higher than during cultivate season.

Figure 2.1 Howard's Extensive Problem Solving Behavior



The Nicosia Model (Wilkie, 1986)

Francesco Nicosia has noticed in 1966 that there are four basic fields of consumer behavior:

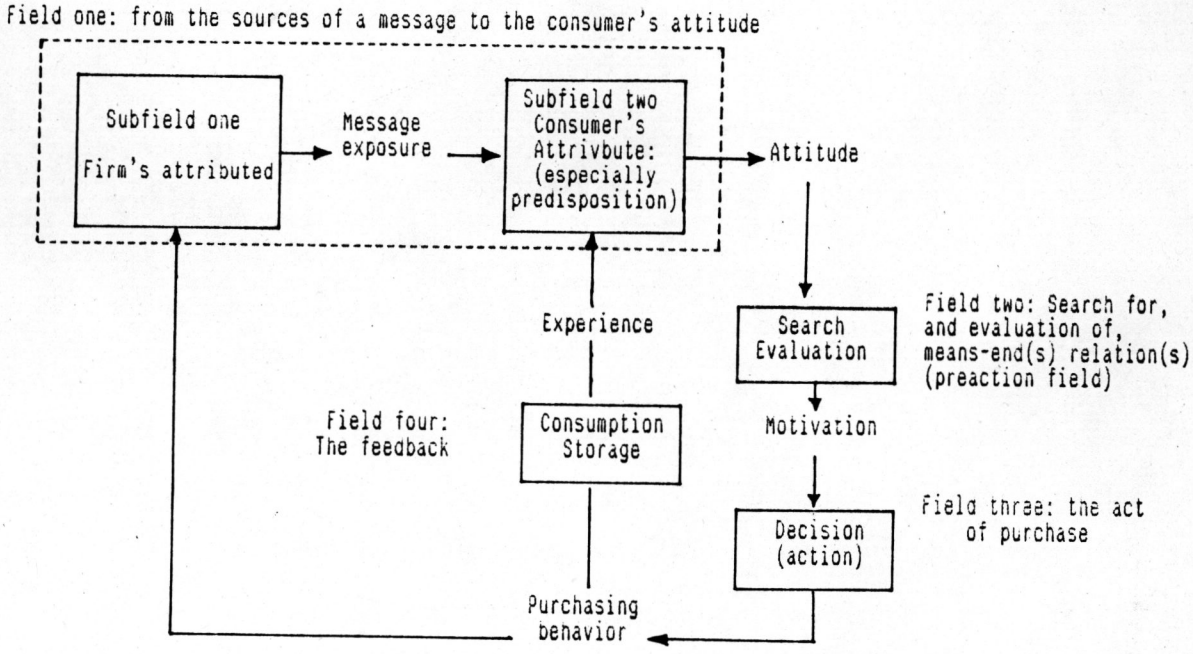
Field one - the message reaches the consumer which is composed according to his psychological attributes. As this message is received and acted upon, the output will hopefully be formation of an attitude toward the product or service.

Field two - represents a search for and evaluation of the advertised product and other available alternatives as well. The output from this field may or may not be a motivation to buy the advertised product. If such a motivation emerges, it serves as an input into Field three.

Field three - the transformation of motivation into purchasing action.

Field four - is the storage or use of the purchased item. The output is feedback of sales results to the business firm and retention of the consequences of the purchase in the buyer's memory.

Figure 2.2 Summary Flow Chart of the Nicosia Model of Buyer Behavior



Robertson, Zielinski and ward (1984) also generated the model of major disciplines and concepts in the study of consumer behavior. Each is briefly described in the following:

Psychological factors : Psychological theories of consumer behavior refer to

1. **Learning theory** views behavior as the result of pattern of reward and punishment associated with various actions, forming the basis for analyzing patterns of repeat buying.

2. **Attitude theory** focuses on the beliefs that consumer hold about health insurance, and on attitudes favorable to the health card, in order to reinforce positive attitude toward health card.

3. **Information processing** essentially portrays the consumer as first perceiving and attending to various marketing stimuli. Using information to reach decisions such as whether or not to buy.

Sociological factors : influenced by

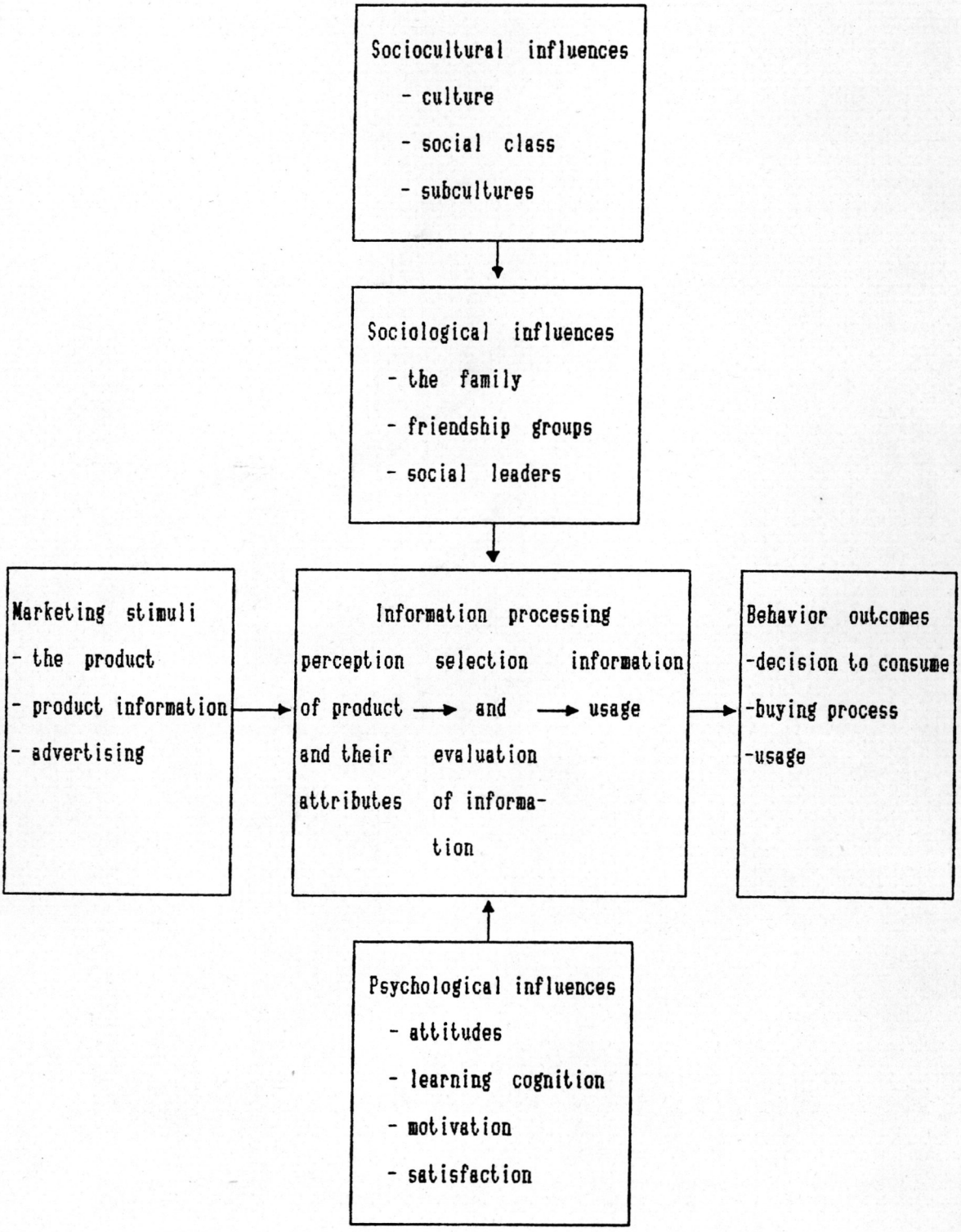
1. **The group** : family

2. **Personal** : other people influence on the individual's purchase of health card

3. **The opinion leader** : community leader, monks, teachers etc.

Sociocultural factors exert the broadest and deepest influence on consumer behavior which influences view of life, attitude and personality: (1) Social class, (2) Subcultures, (3) culture.

Figure 2.3 Major Discipline and Concepts in the Study of Consumer Behavior



Engel, Blackwell, and Miniard (1986) explained that the purchase process is a function of two major determinants (figure 2.4) : (1) buying intentions, and (2) situation influence.

Social influences and individual characteristics such as motives and life-style can also influence this process.

The consumer enters into a purchase with certain expectations about what the product or service will do when it is used. Two outcomes of purchase which can strongly affect future behavior as ***Satisfaction*** or ***Dissatisfaction.***

Kotler (1991) stated that the buyer's behavior is influenced by four major factors: Cultural (culture, subculture and social class), Social (reference groups, family and roles and statuses), Personal (age and life-cycle stage, occupation, economic circumstances, lifestyle, and personality and self-concept), and Psychological (motivation, perception, learning and beliefs and attitudes).

Figure 2.4 Purchase and Its Outcomes (Engel et al., 1986)

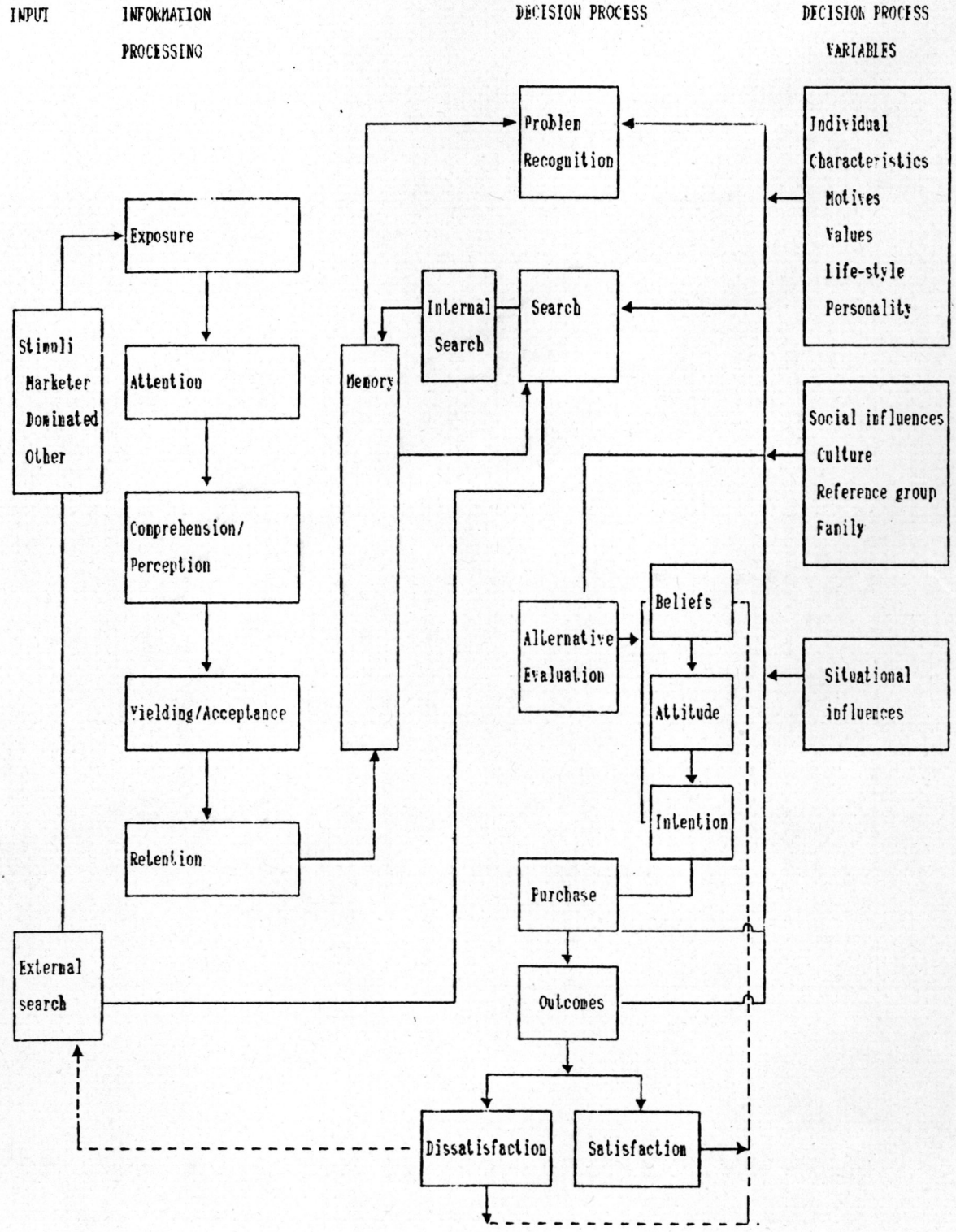
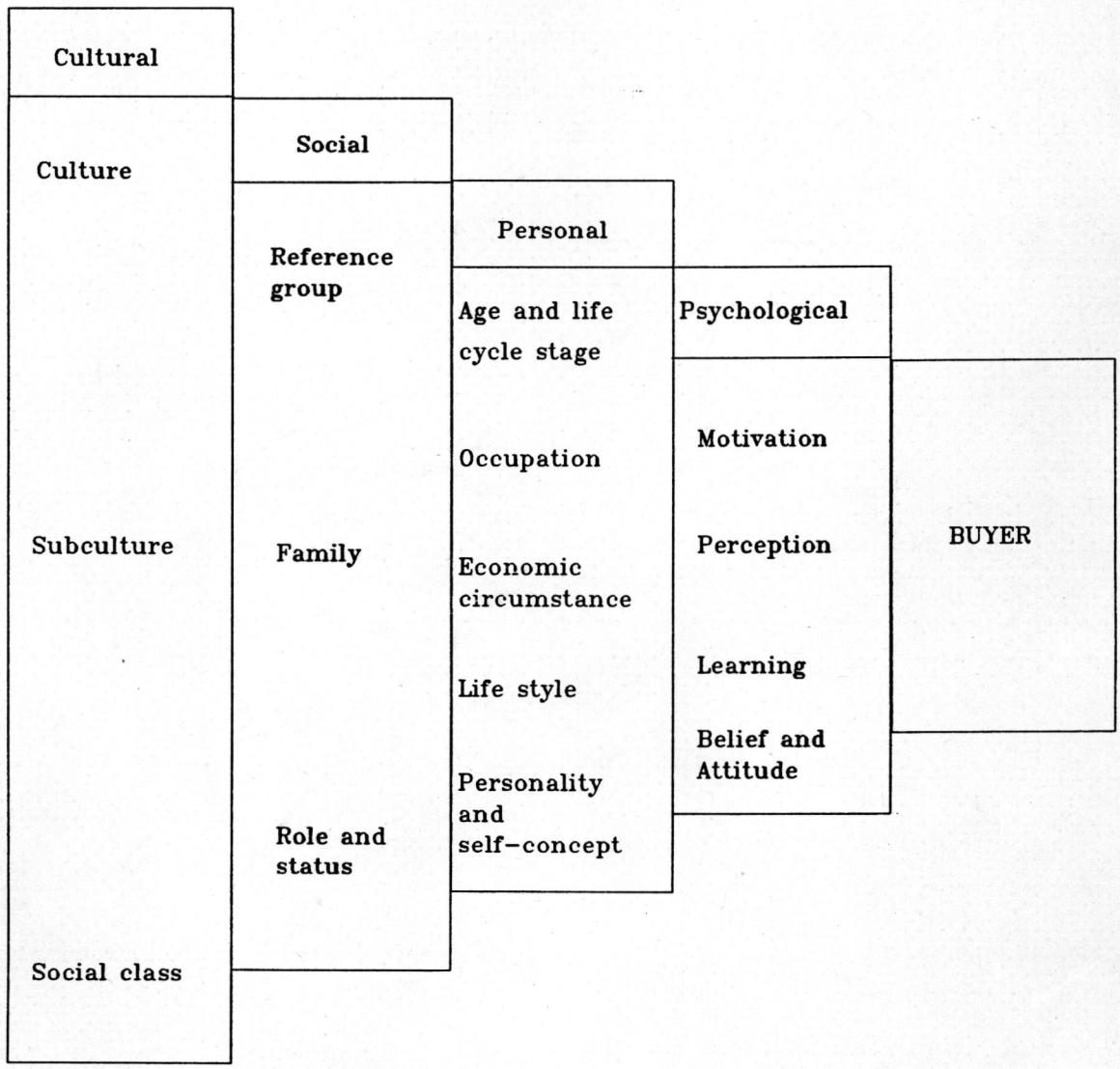


Figure 2.5 Detailed Model of Factors Influenzing Consumer Behavior (Kotler, 1991)

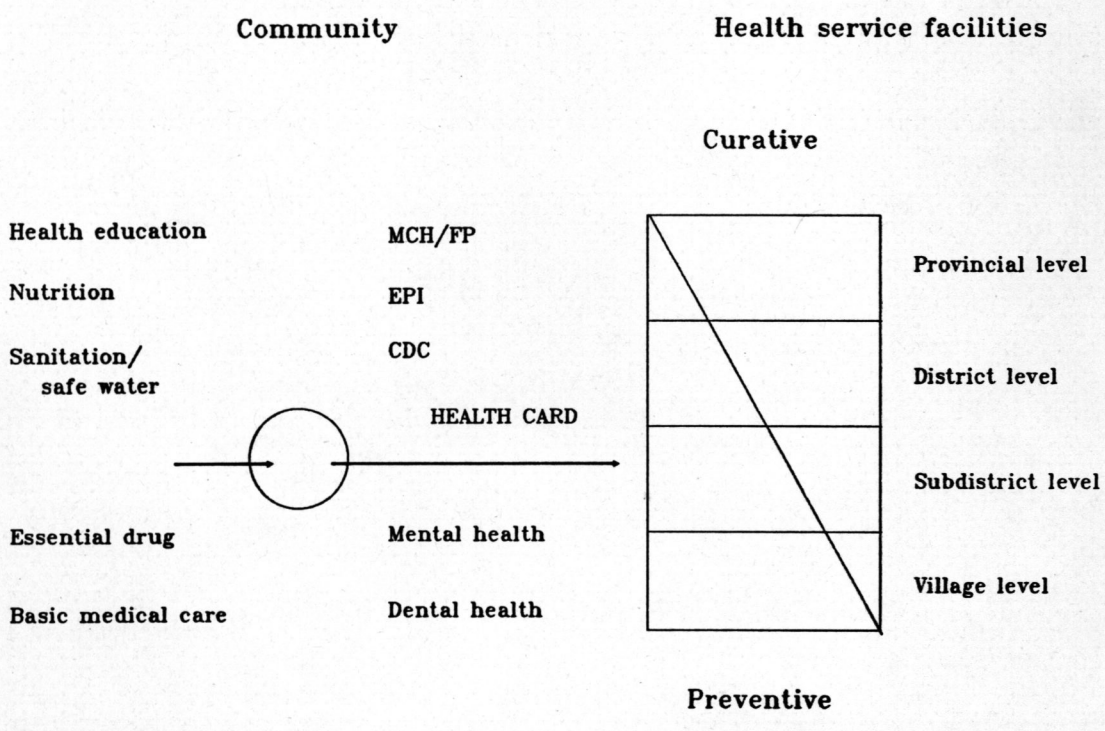


Background of Health Card Program (HCP)

The HCP is implemented in the rural areas of Thailand since 1983. It aims to improve those people's health, based on the Primary Health Care (PHC) approach. HCP started as a maternal and child health (MCH) development program in order to serve a part of PHC which the community could not implement by themselves. Since MCH services without medical treatment are rather difficult to get accepted by the population, it was soon extended in scope to medical care services in general (MOPH, 1985).

The following diagram is the cooperation responsibility between community and health worker to fulfill the purpose of PHC.

Figure 2.6 Diagram of the Co-operation Responsibility between Community and Health Worker



Note: MCH stands for Maternal and Child Health, EPI for Extended Program of Immunization, and CDC for Communicable Disease Control.

The HCP is a substantial innovation being a form of voluntary prepaid health insurance, to influence and structure private rural demand for health services. This prepaid health insurance covers screening and referral services in a systematic manner from village health centers to district and provincial hospitals. The HCP has three types of cards with different levels of costs, benefits and eligibility. All the health cards are valid for only one year and can be renewed yearly. Eligibility and level of benefits obtained through each health card type is based on a consideration of both the need for services and costs.

Figure 2.7 Eligibility and Benefits of Health Card

Types of HC	Eligibility	Main benefits	
		coverage	limitation
1. Family type (green card) 300 baht	One family which include parents and their children under the age of 15 or five specified family members.	- Free treatment 6 episodes	Applicable to all MOPH health facilities and referral authorization required. Free medical services up to 2,000 bht/episode valid for one year with renewal yearly.
2. Individual type (red card) 200 baht	One person	- Free treatment for 4 episodes	Same as family medical care card

Figure 2.7 (Continued)

Types of HC	Eligibility	Main benefits	
		coverage	limitation
3. Maternal and and Child Health Card (blue card) 100 baht	Pregnant woman and/or one or more children under 5	- ANC - Delivery - PNC - A complete standard program of immunization	- Service by health workers - Referral authorization needed for higher level facilities

ANC = Ante Natal Care
PNC = Post Natal Care

Note :
- Other benefits for family and individual medical care card are as follows: 10 % discount at village drug cooperative, 10 % discount for cost of treatment exceeding 2,000 baht, 10 % discount on patient private room.
- In certain dimension, the MCH card is not health insurance, but actually, a form of subsidized health care, aimed to promote utilization of Ante Natal Care (ANC) and neonatal services. Demand is only at pregnancy, and there is no involvement of risk-sharing.

The objectives of the HCP were formally stated as follows (Chiangmai Provincial Health Office and Chiangmai Hospital, 1990):

"1. To insure equity in accessibility to health services for the majority of Thai citizens through the system voluntarily.
2. To encourage the co-responsibility amongpeople for health care of themselves, their families and communities in relevance to primary health care concept."

How does the HCP function ?

The difference between HCP and other kinds of health insurance is that the financial management of the HCP is in the hands of responsible committees at village level, under supervision of health workers according to the rules and regulations set by the MOPH. The sale of health cards and collection of premiums are carried out by the health card committee who also manages revenue collected as a revolving capital for income generating activities initiated by villagers to promote PHC. This means that each health card cycle has a specific time for card selling (In Chiangmai, it is a 3 months period from the starting of new cycle). After that the committee has to make profit from this revenue (e.g. fertilizer by the gross and resell it to other villagers, give out loans) and the health card member is the first priority to receive these benefit. When a health card cycle is at on end, the profit made from the fund management may be considered to lower the card price for the members in the following cycle or to develop community utilities such as road construction, road repairing, water pipelines etc. A fixed 85 % of the HCF is reimbursed to compensate health providers in the referral line (health centers, district hospitals, and provincial hospitals) by the end of each health card cycle.

- Reimbursement to public health facilities 75 % Provincial level 30 %
  - District level 30 %
  - Subdistrict level 15 %

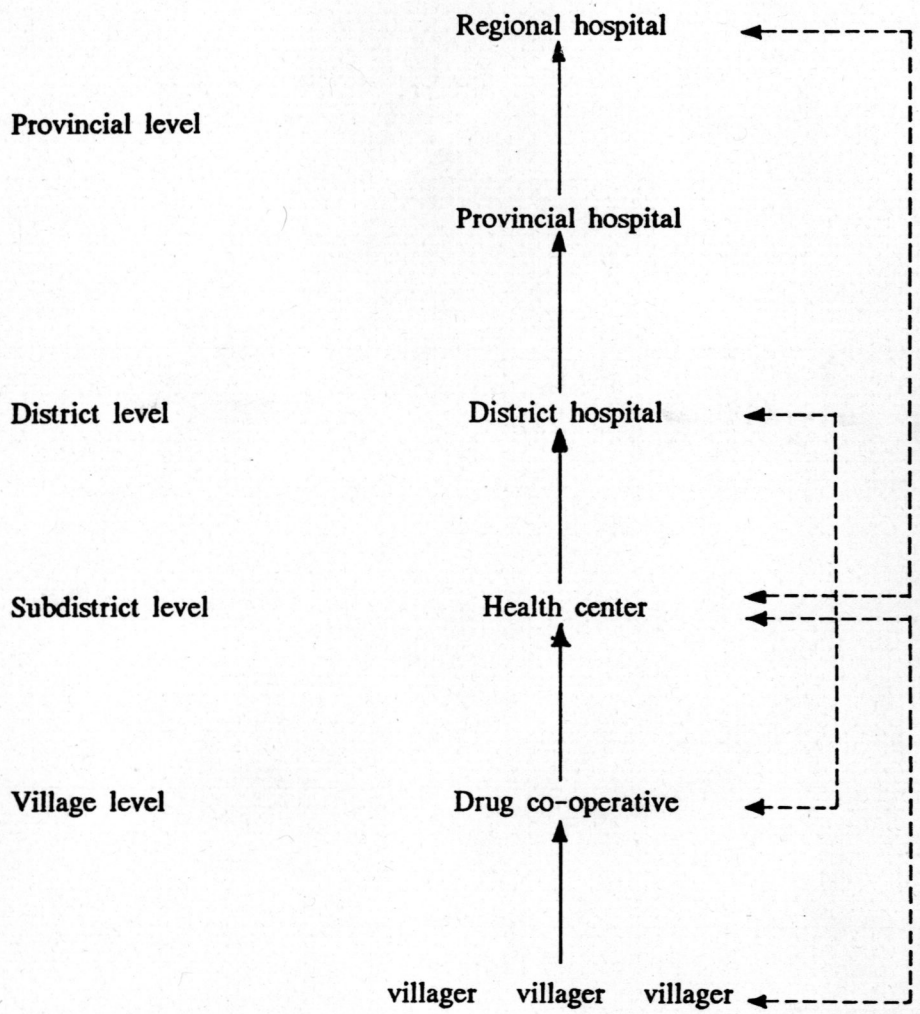
- Incentives to health personnel 10 %
  - Provincial level 2 %
  - District level 3 %
  - Subdistrict level 5 %

- HCF management in the village 15 %

The HCP is an insurance scheme aiming not only at risk pooling but also strengthening the referral system to more efficiently back up village level primary health care and rationalize the use of government health facilities at various levels. To strengthen the referral line, the first contact for a holder is the drug cooperative or the health center but access to upper levels need a referral letter. This

component was initiated with an aim towards reducing unnecessary case load at the hospital level and to increase utilization and cost recovery at the often by passed health center.

Figure 2.8 Hierarchical Relationships of the Referral System



Note : ——————— = referral line, ------------------- = by-passing

The related studies

In relation to prepaid health insurance, the studies have no clear-cut predicting variable factors for continuing enrollment and disenrollment.

Onofrio and Mullen (1977), evaluated the Prepaid Health Plans (PHP) in California. They reported that 46 percent of consumers' complaints were for poor service, 33 percent concerned marketing misrepresentation, and 17 percent involved transportation difficulties. The evaluation had been focused on sources of consumer dissatisfaction leading to disenrollments for PHPs. Talking about poor quality of care, quality is judged firstly by the availability of services. Unfriendly clinic atmosphere, long waiting time or the unavailability of a specialist were apparent in consumer grievances regarding inferior PHPs service.

Sorensen and Wersinger (1981), in their study entitled, "Factors Influencing Disenrollment From an HMO" which conducted in Rochester, New York, found that disenrollees were more dissatisfied with the organization of the HMO (Health Maintenance Organization) and the care they received than those who remained in the plan. Changes in eligibility for HMO coverage and dissatisfaction with various aspects of medical service, such as the perceived quality of care, were the first and second most frequently reported reasons for disenrollment (39 and 28 percent). Sixteen percent reported that they terminated because of cost while a very small proportion (5 percent) disenrolled because of problems with the medical care system, i.e., long waiting time at the center, wanting to see a physician but instead seeing an "assistant", etc.

Hennelly, and Boxerman (1983), in their study of the question of Disenrollment From a Prepaid Group Plan among 25,000 enrollees of the Medical Care Group of St. Louis, stated that a family's illness-related behavior, educational level, and family's income were provided significant differences between the continued membership and disenrollment. The family's illness-related behavior was expressed on days lost to usual activity and visits to providers at MCGSL (Medical Care Group of St. Louis). The group with the lowest level of education was the most likely to be continuously enrolled, while college graduates dominated disenroll category. The families with reporting an annual income of greater than $ 25,000 chose to disenroll at a higher rate than other wage categories.

Mechanic, Weiss, and Cleary (1983), did their investigation on issues of enrollment and disenrollment of the HMOs in the large metropolitan areas of USA, stated that persons who terminated membership in a prepaid group practice when compared with continuing members have less health problems. Enrollees who join the plan on the basis of more direct knowledge of its actual operation are more likely to continue in the plan.

Garfinkel et al., (1986) presented the information about the factors that influence the choice between joining an HMO and remaining with the traditional fee-for-service system among under 65 years of age in three communities (Minneapolis-St.Paul, Minnesota; Worcester, Massachusetts; and Marshfield, Wisconsin). The article identified that sources of marketing information were found to be strongly and positively related to the decision to join the HMO. And hearing about the program from health care providers was positively associated with HMO enrollment. At Minesota, a measure of medical risk indicated that a number of chronic conditions was significantly related to the enrollment decision.

Related studies of the HCP in Thailand

In Thailand, there have been some reported or published studies concerning the HCP utilization in many aspects.

Orachorn Sastravaha (1985), studying the pattern of health services utilization affected by the policy of the HCF of two villages in Roy-ed province, stated that the importance for disenrollment in the HCP were financial barriers, no one in the family getting sick, and time conflicts in participating in the HCP.

Thavitong Hongvivatana et al., (1986) did descriptive research on "Health Service Utilization under the HCP" among rural people. The study was carried out in three provinces, each of them in the central, the northeastern, and the southern part of Thailand. They found that the villager's decision to buy a health card is heavily influenced by two factors: expectation of medical care benefits, improvement of speed and quality of the services. Large families have a higher tendency to buy health cards than small families. Last, but not least, the economic status determines

the ability to become health card members. In-depth interviews from the same study concluded that changed in eligibility for HCP coverage and not making use of the card at all, indicates the reason for disenrollment.

Thanawan Kitphapaiampoon (1988) examined the choice for households to buy health insurance. The study area spanned three subdistricts in Sakolnakhon province. Comparison was made between households that bought and those who did not buy the health card. The economic factors, the household preference, the expectation of household members to get sick and the social status determined significantly the households' decision in purchasing the health card. The study also found out that the main reasons for buying the health card were that people were persuaded by the members of the village committee or the health workers or following peers advice.

The survey of Adeyi (1988) in Mae-na district, Chiangmai province, had reported that the factors limiting the demand for the health card were consumers' dissatisfaction with the quality of public health services, the inability of some households to afford the health card in the selling period and finally, a perceived lack of need for the health card by those who bought the card but never used it.

Vason Silapasuwan (1989) conducted a survey research in three districts in the three provinces of Lower Northen Region of Thailand, stated that knowledge about the HCP is the most important factor influencing HCP enrollment. The distance to a district hospital, and perceived dissatisfaction with health services, is the most important factor affecting the continuity of the enrollment in the HCP. Last, satisfaction with health services is the most important factor affecting the use of health services among continuing enrollees.

Thienchay Kiranandana et al., (1990), evaluated the current HCP situation by a national census of all HCFs and health facilities by questionnaires and found that the reason for buying a health card was not to be insure when getting sick but was purchased for other reason, such as, when it was obvious that a household member getting sick or they were enforced by the others to buy the card.

The survey of HCP in Chiangmai province (1990) states that 70 percent of health card purchasing was to insure when getting sick, while 15 percent was giving the reason to receive faster and better quality services. The main dislike of HCP was the inconvenience medical care system.

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