Chapter 3

LITERATURE REVIEW

The main objective of this study is to compare quality of care between the insured and the non-insured patients. Therefore, the literatures related to health insurance and quality of care were reviewed in this chapter.

3.1 Health insurance

3.1.1 Principles and practice

Health insurance is a system in which prospective consumers of care make payment to a third party in the form of an insurance scheme, which in the event of future illness will pay the provider of care for some or all of the expenses incurred. Health insurance was developed because major illness is uneven and seldom predictable for individuals. When serious illness occurs, the patient often suffers from large medical expenses and also faces the risk of impairment or loss of earning ability. When risks are pooled across a population, unpredictable losses can be transformed to predictable losses. In other words, health insurance is a means of providing members of a defined community with some protection against the cost of health services. Therefore health insurance increases the accessibility and affordability of population to health care services (Phua, 1994).

In broader sense, health insurance has two aspects: (1) financing services in terms of raising all or part of money to health care; and (2) securing the provision of services. In providing health care benefits under a insurance scheme, there are 2 methods: direct and indirect. In the direct method, the health insurance organization builds its own physical facilities; in the indirect method with the third-party payment, medical care is purchased from existing public and private providers (Abel-Smith,1992). Many countries have made an effort to establish appropriate insurance schemes. At present, health insurance is operated in more than 83 countries in the world (US Department of Health and Human Services, quoted by Siriwanaragun, 1996). For developing countries, health insurance will have a major role in mobilizing funds from private sources for health care

services (Puntularp 1995 quoted by An, 1996). In these countries the allocation of health expenditures from the State budget is usually insufficient, with the main proportion of health expenses coming from household pockets. The introduction of health insurance is also a measure to improve the quality of care by giving more resources and motivation to the health care providers (Abel-Smith, 1992)

Health insurance can make both positive contributions and negative contributions to national health objectives. The third-party payment system causes problems of inefficiency. Two characteristics of market failure in the health sector, including moral hazard and asymmetric information, lead to cost escalation. Both patients and providers are less concerned about the price and quantity of services utilized since the cost is born by health insurance agency. Consequently, unnecessary services and drugs are given, and patients visit doctors frequently (moral hazard). Moreover, in the health care market, since consumers do not have sufficient knowledge, doctors as suppliers of services have direct influence on consumption (supplier-induced demand) (Yumiko,1994). Besides the increase in cost, some other shortcomings can be observed such as: a tendency toward an excessive use of technology, an emphasis on curative medicine, the exclusion of the high-risk group etc (WHO, Health care, Who pay,1987). Equity in health insurance schemes is also argued a lot. It is said that there is inequity in the sense that it benefits a minority but imposes a cost on the rest of society by absorbing scarce resources in the health sector (Phua Kai Hong,1990). Kutzin and Barnum (1992) also cited that in a system where only some of the population has insurance coverage, there is clear evidence of differential utilization of services, suggesting moral hazard of the insured and possibly limited access for the uninsured.

3.1.2 Payment methods under the health insurance scheme.

Methods of payment and reimbursement can also influence the orientation of the services, the setting where services are provided, the level of technology used, quantity and quality of care provided, the distribution of health resources and last but not least, the cost of health care (Albel Smith , Leisson , 1978, quoted by Phua Kai Hong, 1990). The methods of reimbursement were attributes of structural approaches in assessing quality of care (Donabedian, 1988). Different

mechanisms of payment under health insurance scheme were reviewed by Abel Smith (1990). Health insurance agency can make contractual payment directly with doctors, hospital or pharmacy. Abel Smith also indicated that: "A hospital will normally want not only to cover its running costs but make a surplus while an insurer wants to get quality and necessary care for the insured person at low cost".

According to Kutzin and Barnum (1992), the reimbursement system of insurance schemes can be classified into two major types: third party retrospective reimbursement and prepaid capitation health care organization. The most common form of retrospective reimbursement is the fee-for-service payment system, which involves charging for each individual service consumed by a patient, such as inpatient bed-days, drugs, X-rays etc.

In Vietnam, the health insurance agency has signed contracts with hospitals based on a mixed payment system. Capitation and fee-for-service combined payment for outpatient care; fee-for-service and flat payment per bed per day for inpatient care. It is a complicated payment system but the payment is based on real expenditure of health care services, actually with a certain ceiling for outpatients. The payment based on fee-for-service could make both of doctor and insured patient be happy. The doctor is given the flexibility to increase income by providing further services. The insured patient on the other hand is provided more free choice, higher quality, higher satisfaction (Abel Smith, 1992). The major question for the health insurance agency is the cost containment under this payment mechanism. The doctor have incentive to prescribe more drugs, order more diagnostic tests etc. In addition, the problem concerning quality of care still occurs here: excessive prescription of drugs, unnecessary surgery, overuse of sotisphicated services etc.

In Brazil, health insurance is a component of a payroll- financed system. It covered 90% of population, nearly universal. Before 1983, the health insurance agency reimbursed physicians and hospitals on a fee-for-service basis without cost-sharing. As a result of this payment method, that country had suffered from large cost escalation. Health expenditure increased by more than 20% annually during the 1970s and the public sector health expenses as a share of GDP rose from 1% in 1949 to 5.6% in 1982 (World Bank data, quoted by Kutzin and

Barnum,1992). As in Brazil, prior to 1983, China experienced rapid cost expansion resulting from third-party fee-for-service reimbursement of 100% of health service charges even though the coverage of health insurance in China covers only 20-30% of the population. Total health expenditure grew at an annual average rate of 17% in real terms from 1980 to 1988, increasing from 2.6% to 3.2% of GDP during these years. Most of this growth has resulted from increases in patient fee payments (average annual growth rate of 23%) and insurance reimbursement (15% annual growth). The context of health insurance in Vietnam has many similar features to China. The health facilities are publicly owned; the health workers are paid on a salary basis and reimbursement is mainly based on fee-for-service.

Cost containment can be obtained with the capitation method or on the basis of payment by diagnosis. Capitation is a method of paying by the number persons on a list and regardless of the number of units of service rendered. This method is commonly applied to doctors in many countries such as UK, Denmark, Netherlands, and Italy (Abel-Smith,1992). In Thailand, the capitation method is applied for social insurance. The main advantages of this payment method for insured persons are free choice of doctor (up to the limits imposed on doctor's list sizes) and continuity of care. Cost is predictable and controllable. The advantage from the insurer's point of view is that administration is simple and easy to handle. The question of poor quality services may be due to too few diagnostic tests and overused deputizing services.

Payment by diagnosis is an alternative to fee-for-service reimbursement for hospital inpatient care. With this method, there is one global charge based on the category of patient admission irrespective of the type and quantity of specific services provided during the patient stay. The most well-known example of this payment method is the Medicare hospital payment system in the United States, called Diagnosis Related Groups (DRGs) which classify diagnosis into certain specific groups, for each of which a lump sum is paid to the hospital for the whole period of stay. The advantage of this system is cost control, since the hospitals have the incentive to minimize hospital costs per case in order to maximize hospital net income. Minimizing cost can be achieved through several ways: shorter the length of stay, substitution of less expensive inputs for costlier ones, reduction in the quality of care or a combination of all

three (Siriwanarangun,1996). Therefore, controls can be introduced to monitor readmissions, in relation to the honesty of the hospital in reporting the diagnosis correctly. The DRGs system may be unsuitable for most developing countries because it is complicated to develop and difficult to administrate (Ron et al,1990, quoted by Siriwanarangun,1996). To control the cost escalation resulting from fee-for-service reimbursement of private providers, Brazil has applied payment per diagnosis (case-based payment). However, this measure did not appear to be effective in controlling health care costs because it created an incentive for private hospitals to increase certain types of admission (Kutzin and Barnum, 1992).

Every payment method has its advantage and disadvantage. It is not easy to choose an appropriate method of payment for health insurance system. Each country has to consider experiences from others as well as from their own system in order to adopt the most suitable one.

3.2 Quality of care

3.2.1 Definition

Quality of care cannot be measured if it cannot be defined. Unfortunately, there is no single definition of quality in the health care field. Lohr (1990) found more than 100 definitions of (or sets of parameters to consider in defining) the quality of care (Friedman, 1995). Donabedian (1988) considered quality of care as a balance of benefits minus risks and costs. Steffen (1988) tried to give an improved definition of quality of care after reviewing current definitions and looking at definition of quality in general. He stated that quality of care is the capacity of the elements of that care to achieve legitimate medical and nonmedical goals. He also suggested that quality can be measured only with reference to the goals. From different perspectives, these goals will be different. The perspective can be government, health insurance companies, hospital administrators, patients and their families or health care providers (Steffen, 1988). In general, these goals are classified into medical goals involving technical aspects and nonmedical goals referring to interpersonal aspects. There is growing consensus among some health service researchers on the use of the quality definition of Institute of Medicine (US), which states that: "Quality of care is the degree to which health services

for individuals and population increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (Friedman, 1995). However, the author realized that the following definition given by Racoveanu and Johansen (1995) was broad enough to encompass several traditional quality-measurement ideas and emerging ideas. These authors stated that quality of care is considered to be care or service that meets specified requirements and, given current knowledge and resources, fulfill expectations for maximizing benefits and minimizing risks to the health and well-being of patients.

Concerning definitions of quality of care, health care of good quality is also identified. Donabedian (1988) judged it to be good quality if care, at the time it was given, it conformed to the practice that could have been expected to achieve the best results. In 1986, the American Medicine Association adopted a report listing 8 elements that characterized quality care. These eight elements are as follows. Quality care should:

(1) Produce optimal improvement in the patient's health;
(2) Emphasize the promotion of health and the prevention of diseases;
(3) Be provided in a timely manner;
(4) Seek to achieve the patient's informed cooperation and participation in the care process and decisions concerning it;
(5) Be based on accepted principles of medical science;
(6) Be provided with sensitivity and concern for the patient's welfare;
(7) Make efficiently documented to allow continuity of care and peer evaluation.

These elements can be used to identify care of high quality (Steffen,1988). According to Racoveanu and Johansen (1995), health care of good quality is characterized by:

(1) A high degree of professional excellence;
(2) Efficiency in the use of resources;
(3) Minimal risk to the patients;
(4) Satisfaction of patients;
(5) A favorable impact on health.

The components of good quality of health care is a basis on which to develop indicators in assessing

quality of care.

There is likely a relationship between quality of care and efficiency of health system in terms of ensuring value for the dollar spent and customer satisfaction (Friedman,1995). Theoretically, it is possible to separate quality from efficiency. Technical quality is judged by the degree to which achievable improvements in health can be expected to be obtained. Inefficiency is judged by the degree to which expected improvements in health are achieved in an unnecessarily costly manner. In practice, lower quality and inefficiency coexist (Donabedian,1988). Most doctors tend to pay attention to technical quality only but ignore the costs. Nevertheless, the practice of optimal care requires the added knowledge of cost (Torrance 1986, quoted by Donabedian, 1988). When concerns exist about the growth of health care cost and rising utilization, the quality of care is considered as a means of controlling spending growth and improving service (O'leary and Walker1994, quoted by Friedman, 1995). In health insurance with a third-party payment system, the insurer usually has to deal with cost escalation and overutilization of health services. They want to get quality and necessary care for the insured person at low cost (Abel-Smith, 1992)

3.2.2 Assessment of the quality of care

Measuring the quality of care has traditionally relied on the structure-process-outcome framework developed by Donabedian (1980). In this framework, "structure" refers to the characteristics of the resources in the health care delivery system, including the attributes of material resources (such as facilities, equipment, and money), of human resources (such as number and qualification of personnel), and of organizational structure (such as medical staff organization, methods of peer review, and methods of reimbursement). " Process" denotes what is actually done in giving and receiving care. It includes the patient's activities in seeking care and carrying it out as well as the practitioner's activities in making a diagnosis and recommending or implementing treatment. " Outcomes" are the end result of care. They include the improvements in the patient's knowledge and changes in behavior, the degree of patient 's satisfaction, and other changes in patient's current and future health (Donabedian, 1988).

Donabedian also cited the important linkage between structure and process, and between process and

outcome. Good structure increases the likelihood of good process, and good process increases the likelihood of a good outcome. There are some arguments about process and outcome approaches. Persons who criticize the use of process data to measure the quality of care worry that these measures may not be important predictors of outcome, e.g the cost of medical care might increase without producing any improvement in health. People who criticize the use of outcome measures believe that most differences in outcomes among patients receiving the same treatment are the result of factors not under control of the health care provider such as differences in patient's characteristics. In fact, process and outcome measures each have strengths and weaknesses, we cannot say either of these two measurements has the superior validity compared with the other (Donabedian, 1988). Donabedian concluded that it is best to include any system of assessment elements of structure, process, and outcome. This allows supplement of weakness in one approach by strength in another.

In the present study, the quality of care was assessed by two approaches: process and outcome. The structure attribute can be omitted because the comparison of quality of care between two groups of patients is in the same hospital.

According to Donabedian, there are several levels at which quality of care may be assessed. The care can be seen from the performance of the doctors and other technical providers, from the care received by patients, or by communities (Donabedian, 1988). There are two elements in the performance of doctors: one technical and the other interpersonal. The goodness of technical performance is judged in comparison with the best available in practice. The interpersonal performance is judged by following the individual and social expectations and standards. The contributions of the patients and their families to care can be included in assessing the quality of care. At the level of community, the assessment of quality of care encompasses the access to care and quality of care as seen from both provider and patient perspectives (Donabedian, 1988).

In the assessment of quality of care, it is vital to specify criteria and standards which represent the attributes of structure, process, and outcome. There are two main criteria: implicit and explicit (Donabedian, Donabedian,1988). In the implicit approach, unspoken criteria are used when an expert practitioner gives

information about a case and is asked to use personal knowledge and experience to judge the goodness of the process or outcome of care. The important advantage of implicit criteria is the adaptability to a particular case if the reviewer is qualified and accomplished in the task. However, it is extremely costly and rather imprecise because there is lack of accurate guidelines for quantification and limited knowledge on the part of the reviewer (Donabedian, 1988).

In the explicit approach, explicit criteria and standards for each category of cases are developed and specified in advance, often in detail, usually by a panel of experts, before the assessment of individual cases begins. The major advantages are the method is standardized and easy to use. The disadvantages are that it is expensive and difficult to develop criteria, it may not be relevant to the situation of practice, it may not be flexible to the different characteristics of particular cases, and it may not appropriately represent what is more or less effective in improving of health (Donabedian, 1988).

After considering the strength and limitation of implicit and explicit methods, Donabedian recommended use of both in sequence or in combination. The explicit criteria are usually used to classify cases into those which are likely to have received good care and those which are not. Then the cases are reviewed by using the implicit criteria . In a national study of the effect of the diagnosis related groups-based prospective payment system on quality of care for hospitalized Medicare patients in the United States, both implicit and explicit methods were used (Kahn et al, 1990). With explicit measurement, each patient's care was compared with predetermined criteria. With implicit measurement, each patient's medical record was assigned a quality of care based on a physician's judgment of the adequacy of the care.

In his study, Jencks (1995) suggested that process of care indicators should rest on science-based, professionally developed clinical practice guidelines. Accordingly, it is rational when the author intends to use the guidelines of treatment as a standard for comparing quality of care between two groups of patient, insured and non insured at Viet-Tiep hospital in Haiphong, Vietnam.

The tracer method is developed to measure both

process and outcome of health care. Donabedian (1988) suggested that the sampling technique should be either sample or stratified random sampling because cases are classified by disease or condition. In the tracer method, patients may be first classified by subdivisions of the area of health service in general (Kessner et al, 1973, quoted by Donabedian, 1988). Then selected categories of patients, identified by diagnosis or otherwise, can be assumed to characterize clinical achievement of the service for the group. The diseases are selected corresponding to the criteria. There are 6 criteria for selecting appropriate tracers according to Kessner et al (Siwinarangsun,1996):

(1) A tracer should have a definite functional impact;
(2) A tracer should be relatively well defined and easy to diagnose;
(3) Prevalence rates should be high enough to permit the collection of adequate data from a limited population sample ;
(4) The natural history of the condition should vary with utilization and effectiveness of medical care;
(5) The techniques of medical management of the condition should be well defined for ≥1 of the following processes: prevention, diagnosis, treatment, or rehabilitation;
(6) The effects of the nonmedical component on the tracer should be understood.

In this study, the tracer method was applied to analyze outpatient drug prescription and inpatient medical record.

Donabedian (1988) stated that all the activities of assessment of quality of care depends on available, accurate, and suitable information. The key source of information about process of care and its immediate outcomes is the medical record. However, the medical record is often incomplete, frequently omitting significant elements of technical care and interpersonal process. Another handicap is inaccuracy of some information due to errors in diagnostic tests, in clinical observation, and clinical assessment. Furthermore, the information provided by medical records cover only a limited segment of care, that in the hospital, providing no information about what comes before and after. Regardless of those weakness, the

medical record is generally used in quality assessment together with other measures.

Prescribing practice is a major element in curative care performance, with potential influence on both the efficiency and quality of care provision (Gilson et al, 1993). Assessing prescribing practice was undertaken by Gilson and his coworkers in 1993 as part of a wider evaluation of primary health unit performance in the Morogoro region of Tanzania in terms of efficiency with respect to the costs and quality of care. Quality was examined through assessment of structure, process and community satisfaction. Process quality of care is reviewed by observing health workers during consultations, using pre-established checklists embodying quality criteria and standards. The assessment of prescribing practice is based on the indicators recommended in 1993 by the International Network for Rational Use of Drugs(INRUD); prescribing is assumed to be more rational if the indicators have lower values (Kanji et al 1992, quoted by Gilson et al, 1993). The study included two steps: (1) to analyze the retrospective data - a random sample of up to 100 prescriptions from 2 months in each unit based on INRUD indicators; and (2) to evaluate the patient care and the conforming level against national treatment guidelines of prospective data - the observations of consultation and prescriptions obtained for each patient. Regarding costs versus quality, Gilson et al (1993) found that differences in overall cost performance had little relation to prescribing practice differences. They cited irrational drug use as an example which can both raise costs and impair the quality of care, for example, by prescribing unnecessary drugs, on the other hand, low costs can also imply poor quality where under-prescribing is practiced. Gilson concluded that assessment of drug use should be a key facet of any strategy to maintain or improve quality whilst pursuing greater efficiency in resource use. Therefore, the analyzing prescribing pattern is used in this study to assess quality of care at the OPD area.

Indaratna (1996) stated that the perception of quality of care from the consumer's perspective is crucial and positive, reaction to this can help sustain a reasonable health sector performance. In outcome assessment, the degree of patient's satisfaction with care is an appropriate measure. It may be judged to be one of the desired outcomes of care (Donabedian, 1988) because other outcomes are difficult to measure or

develop after treatment. The validity of a patient's judgment about interpersonal aspects of care, issues of accessibility, and availability tend to be accepted (Siriwanarandsun,1996).

Satisfaction refers to the extent to which individual needs and wants are met. In health care, patient satisfaction is linked to predetermined attitudes toward the medical care system as well as to expectations and perceptions regarding the quantity and quality of care received (Rossiter et al,1989). Satisfaction is a multidimensional variable. It can be time-related (waiting time, contact time), doctor-patient relationship related or information-related (Indaratna,1996). Eight dimensions that contribute to patient satisfaction or dissatisfaction with care were proposed by Ware et al (1978, quoted by Rossiter et al, 1989): the art of care, technical quality, accessibility, convenience, finance, physical environment, availability, continuity, and efficacy and outcome.

Patient satisfaction survey, postal questionnaire, interview or telephone survey, is often used to investigate the level of satisfaction of patient with health services. The identification of indicators and questions is very important when interviewing for patient satisfaction. The questionnaire should be designed carefully. Pre-testing it and selecting the appropriate questions are suggested (McIver,1992). Tangcharoensathien et al (1996) designed two sets of questionnaires in order to examine consumer perspective on different aspects of quality of services provided at outpatient clinics and inpatient wards in 9 hospitals in Thailand. The outpatient questionnaire includes questions about quality perception by the patient in terms of waiting time, information and communication, price charge, treatment and care. For the inpatient questionnaire, quality perception consisted of information and communication, price charge, length of stay, treatment and care. The characteristics of patients such as sex, age, region of residence etc. often affect the level of satisfaction, thus the questionnaire should cover this information.

In Vietnam, the assessment of quality of care is still very little. Among a limited number of studies concerning this problem, an evaluation of quality of public health services was conducted by Truong Viet dung et al (1994) in four rural communities of Quangninh province. One of the major objectives of this study was

to develop methods for evaluating the quality and quantity of primary health care services in the context of Vietnam. The authors used a checklist for assessing the quality of health station services and some key programs including respiratory infection and diarrhea. Quality of care was assessed by examining the number of curative consultations, quality of medical care and use of drugs. Diagnoses and treatment recorded in the consultation books were compared with national treatment guidelines. They also noted that although the commune health station records are not a perfect indication of the health care actually practised, they do reflect the general pattern of care provided. The evaluation on drug use based on INRUD indicator .

3.3 Quality of care under the health insurance scheme

To evaluate the effects of any health care financing system, there are 3 issues that should be considered: equity, efficiency and cost-effectiveness (Phua,1990). Phua also stated that the emphasis has been placed on the quality of care including both of process and outcome aspects. The intermediate effects of the health care processes is measured by professional standards or acceptable norms. The outcomes of health status is considered as the final output resulting from inputs of health resources and health care.

Quality has been a topic of attention in American health care since the early years of this century (Donabedian, 1989, quoted by Friedman, 1995). On the other hand, health insurance, including private health insurance organized into Health Maintenance Organization (HMOs) and social insurance such as Medicare, Mediaid play an indispensable role in the health delivery system in US. It is often said stated that the payment mechanism can influence the delivery of health services. Therefore, quality of care under different payment mechanisms has been assessed. Kahn et al (1990) conducted a 4-year nationwide evaluation of the effect of the diagnosis related groups-based prospective payment system on quality of care for hospitalized Medicare patients. This study was designed as a retrospective before-after study. Quality was assessed by process and outcome approaches. They used mortality rate 30 and 180 days after admission to examined the outcome. They conducted a mortality analysis in which they used linear regression to estimate how changes in death rates were associated with each of 14 variables. The quality of process of care was measured by means of explicit

criteria and by implicit review by expert clinicians. In relation to the process-outcome link, better process of care was shown to be associated with better outcomes. In addition, because of the prospective payment system (PPS) incentive to reduce length of stay (L.O.S), they also measured patient instability at discharge. The tracer method was applied in this study with 6 selected diseases. The information was obtained from medical records of patients and from the Health Care Financing administration files. According to the results, the authors concluded that prospective payment system did not affect the mortality and process of care in hospital but increased the likelihood that a patient will be discharged in an unstable condition.

In another study (Rossiter et al, 1989), the differences in patient satisfaction between beneficiaries enrolled in HMO plan with the capitation payment method and beneficiaries in the fee-for-service (FFS) sector was analyzed. Telephone surveys were conducted. Two dimensions of patient satisfaction were focused upon: satisfaction with the technical quality of care and accessibility. No difference in overall satisfaction was found between two groups. However, HMO enrollees expressed less satisfaction compared with FFS beneficiaries regarding specific aspects of quality such as professional competence and the willingness of the HMO staff to discuss problems. On the other hand, HMO enrollees were more satisfied than FFS beneficiaries with waiting time and claim processing.

In Thailand, the social insurance scheme provides health care services to the insured through networks of clinics with main contractors who are paid on a capitation basis. The Medical Social Security Centre (MEDSEC) is the biggest private network and Nopparat is the biggest publicly-organized network. Siriwanarangsun (1996) evaluated quality of care in MEDSEC network by three approaches: structure, process and outcome. Infrastructure of MEDSEC and Nopparat networks were compared in terms of general administration, outpatient service, laboratory and X-ray, pharmacy, operating and delivery room, and inpatient ward. The information was obtained by using questionnaires sent to clinics and hospitals. Process of care was examined in 2 aspects: outpatient (OP) drug prescription and inpatient (IP) care. Siriwanarangsun used the tracer method in assessing process of care. Diarrhea and appendicitis were selected for IP study. Upper respiratory infection, arthritis, urinary tract diseases, and hypertension were chosen for

OP study. He analyzed OP drug prescription based on the prescribing indicators recommended by WHO (1993), and then compared the detail of treatment in each tracer to the standard treatment adopted from the Food and Drug Administration of Thailand. Analysis of IP care was based on medical records and results of questionnaires designed to investigate the outcome of medical treatment. The explicit criteria were established by a panel of experts for each disease. Patient satisfaction was used to measure the outcome of care. Satisfaction of IP of MEDSEC and Nopparat networks was examined by using structured questionnaire to interview IP. Five aspects of IP satisfaction were considered: admission activities, treatment and care, information and communication, ward environment and facility, discharge and outcome activities. Siriwanarangsun could not draw an overall conclusion on quality of care in MEDSEC networks, however, the conclusion was drawn for each aspect of study, and in general IP more satisfied with the MEDSEC than the Nopparat networks.

Yumiko (1994) considered quality of care as one of criteria of equity when she evaluated the experiences of Health insurance in Thailand in terms of equity and efficiency. The Delphi survey (Delphi technique) was used to assess three current schemes of Health insurance in Thailand including: the Free Medical Care for the Low Income Household(LIH), the Social Security Scheme(SSS) and the Health Card Program (HCP). The questionnaires sent to experts contained one question concerning quality of care, whether the quality of care provided to the insured is satisfactory. The indicators of quality of care here are the qualification of health facilities visited in terms of health personnel, supplying material and drugs and the consumer's satisfaction with services. Results from response to the survey showed that the quality of care provided the insured patients is regarded as relatively low in all three health insurance schemes. The capitation payment is cited as main reason for this situation.

Quality of care was also reviewed by Supachutikul (1995) when he analyzed the health insurance schemes in Thailand. This author commented that there are very few studies on quality of services across various financing schemes while the equity, efficiency, and quality of care seem to be the universal goals for every developed country. Previous studies related to quality of services under health insurance schemes were reviewed. Bennette (1994) studied consumer knowledge and perceptions of

hospitals among formal sector workers in Bangkok by using in-depth-interview and found that nearly 50% of respondents, on at least one occasion, had been very dissatisfied with the services provided at hospital. These interviewees are covered by the Workmen Compensation Fund. The drug prescription comparison between Social Security Patients and other patients are considered by Sirivanaran (1995). She analyzed drug prescriptions of ambulatory patients in a private social security network. The payment mechanism to the network is by capitation from the Social Security Office. It was found that the item per prescription of the Social Security patient was not lower than for general patients but the average price was lower. Some diseases had been selected to investigate the difference in prescribing pattern between Social Security patients and general patients. The conclusion drawn is that payment mechanism affects the change in physician practices. This change moves toward reducing the wastage from unnecessary treatment in some conditions.