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**EVALUATION OF THE QUALITY OF SERVICES DELIVERED
BY GOVERNMENT HOSPITALS UNDER THE UNIVERSAL
COVERAGE HEALTH INSURANCE POLICY: A CASE
STUDY OF NONTHABURI PROVINCE**

AUEMDUEN KAEWSAWANG
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With compliments
of

บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล

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Auemduen Kaewsawang

EVALUATION OF THE QUALITY OF SERVICES DELIVERED BY GOVERNMENT HOSPITALS UNDER THE UNIVERSAL COVERAGE HEALTH INSURANCE POLICY: A CASE STUDY OF NONTHABURI PROVINCE.

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ABSTRACT

This study describes the relationship between individual characteristics and evaluation of service quality. The study also compares services expected by patients, actual service received under the universal coverage health insurance policy, and examines the relationship between expected services and actual services received as a means of evaluating service quality. The sample for the study was 400 outpatients, aged 15 years and over, who received government hospital services under the universal health insurance policy in Nonthaburi province. Data analysis included descriptive statistics, i.e. percentages, means, standard deviations, maximum and minimum values; and analytical statistics, i.e. T-test, ANOVA for One-way Classification, and Pearson Product Moment Correlation Coefficient.

The result revealed that sex, age, and education are variables that affect evaluation of service quality. Most patients had expectations about services that were higher than the actual services received. Expected services and actual services received had a significant positive relationship with evaluation of service quality, but at a low level. On the contrary, actual services received had a high or very high level of relationship with evaluation of service quality. In addition, the difference between expected service and actual service received had a negative relationship with the evaluation of service quality. The results are consistent with Oberst's theory.

The findings suggest that the pattern of demand of patients for hospital services include 1) service system dimensions, i.e. clear communication system, adequate number of personnel, medical equipment and devices, location, and waiting time; 2) service behavior dimensions, i.e. provision of information, disposition of personnel, equality of services, and ability to provide treatment.

**KEY WORDS: UNIVERSAL COVERAGE / HEALTH INSURANCE /
GOVERNMENT HOSPITAL / QUALITY OF SERVICES /
HEALTH POLICY / 30 BAHT SCHEME**

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การประเมินคุณภาพการให้บริการของโรงพยาบาลรัฐที่ดำเนินงานตามนโยบายหลักประกันสุขภาพ
ถ้วนหน้า: กรณีศึกษาจังหวัดนนทบุรี (EVALUATION OF THE QUALITY OF SERVICES
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บทคัดย่อ

การศึกษานี้ มีวัตถุประสงค์เพื่อเปรียบเทียบปัจจัยด้านลักษณะส่วนบุคคลที่มีผลกระทบต่อ
การประเมินคุณภาพบริการ และเปรียบเทียบบริการที่ผู้ป่วยคาดหวังและบริการที่ผู้ป่วยได้รับจริง ต่อการ
บริการตามนโยบายหลักประกันสุขภาพถ้วนหน้า รวมทั้งหาความสัมพันธ์ระหว่างความคาดหวังและบริการที่
ได้รับจริงกับการประเมินคุณภาพบริการ กลุ่มตัวอย่างที่ศึกษาในครั้งนี้เป็นผู้ป่วยนอกที่มีอายุ 15 ปีขึ้นไป
ที่มาใช้บริการจากโรงพยาบาลรัฐในจังหวัดนนทบุรี ที่ดำเนินงานตามนโยบายหลักประกันสุขภาพถ้วนหน้า
จำนวน 400 คน การวิเคราะห์ข้อมูลใช้สถิติเชิงพรรณนา ได้แก่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน ค่า
สูงสุด ค่าต่ำสุด และสถิติเชิงวิเคราะห์ ได้แก่ การทดสอบค่าที (T-test) การวิเคราะห์ความแปรปรวนทาง
เดียว (Anova for Oneway Classification) และค่าสัมประสิทธิ์สหสัมพันธ์แบบเพียร์สัน (Pearson Product
Moment Correlation Coefficient)

ผลการศึกษาพบว่า เพศ อายุ และการศึกษา เป็นตัวแปรที่มีผลกระทบต่อการประเมินคุณภาพ
บริการ และผู้ป่วยส่วนใหญ่มีความคาดหวังสูงกว่าบริการที่ได้รับ รวมทั้งความคาดหวังและบริการที่ได้รับ
จริงมีความสัมพันธ์ทางบวกกับการประเมินคุณภาพบริการอย่างมีนัยสำคัญทางสถิติ โดยความคาดหวังมี
ความสัมพันธ์กับการประเมินคุณภาพบริการในระดับค่อนข้างต่ำ และบริการที่ได้รับจริงมีความสัมพันธ์
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CHAPTER I

INTRODUCTION

1.1 Background and significance of the problem

During the past 5 years, there have been increasingly rapid changes in social and economic life, politics and technology both at national and global levels. As a result, the Thai health system has also changed considerably. At present, the Thai government is paying more attention to the health quality of the life of the people. In the current constitution, Section 52 of Chapter 3 states that *“Individual is entitled to all equal rights in receiving standard public health services. The poor is entitled to all rights to receive medical treatment from public health service facilities at no cost as stated by law”*. Section 82 of Chapter 5 stipulates that *“Government must provide and promote standard and efficient public health services for all people”* (The Constitution of the Kingdom of Thailand, B.E.2540, 2541: 13, 19).

In providing universal coverage health insurance, the government has taken into account equal access of health care services of the people and service standards, while also emphasizing health promotion, disease prevention, treatment, and rehabilitation, aiming at increasing the health well-being of the Thai people (Sukhothai Thammathirat Open University, 1990: 50-51). The concept of universal coverage health insurance has long been introduced into the Thai society, initially addressed by Prof.Dr.Puay Ungpakorn in his article on *“Perspective on Southeast Asia Development in 1980”*, and in his well-known article *“From the womb to the crematory”*. He stated that *“...I need good health, and the government has to provide free preventive services, good and inexpensive medical care, including easy access to the doctors and nurses when needed...”* (Komol Keem tong Foundation, 1999: 6).

Based on several research studies conducted by various universities and the Ministry of Public Health, the concept of universal coverage health insurance had become reality. Thailand employs a number of health insurance and health welfare schemes, which include health treatment welfare for the poor, government and state enterprise officials, social insurance, voluntary health insurance (with health insurance

cards) implemented by the Ministry of Public Health, and the health insurance system operated by the private sector. Others include the compensation fund to cover the illness due to work, and road accident insurance according to the Car Accident Victims Insurance Act.B.E.2535. It was found that about 30 % of the Thai people i.e. the disadvantage groups, are not included in any form of health insurance. These include farmers, agriculturists, fisherman, the unemployed, informal labour, freelance workers, hired workers, housewives, merchants, and the poor (unable to identify themselves as poor because of no residence and identification cards) (Office of Health Service System Reform Project, 2001: 7). Realizing such social inequality, the government has thus initiated and implemented the universal coverage health insurance project to cover all those into the health insurance system.

Following the last nationwide election, the Thai government, headed by Pol.Cap.Lt.Taksin Shinawatr, proposed universal coverage health insurance policy through “30- Baht coverage treatment” as an urgent government policy to be launched on 1 April 2001.

Phase 1 This phase started in six pilot provinces namely; Pathumthani, Samutsakorn, Nakorn Sawan, Phayao, Yasothorn, and Yala. Under this project, the patient pays only 30 Baht for each hospital visit, while the government subsidizes 1,052 Baht per person (Working Group for Preparation of Universal Coverage Health Insurance System, 2001: 5). There were 1,271,300 people who registered and received the health insurance cards. The project had been implemented in the six provinces in six months with a budget of 399.7 million Baht.

Phase 2 The second phase was implemented on 1 June 2001 in 15 provinces, i.e. Saraburi, Srakaew, Nakorn Ratchasima, Surin, Nongbualamphoo, Ubon Ratchathani, Amnartcharoen, Sisaked, Sukhothai, Phrae, Chiangmai, Phuket, Narathiwat, Petchburi, and Nonthaburi. This phase was implemented in all government hospitals and those private hospitals enrolled in this project. At this phase, the number of registered clients and health insurance cards was increased to 4,306,112, with the total budget of 1,510.2 million Baht.

Phase 3 This is a nationwide implementation started on 1 October 2001. For Bangkok Metropolitan Area, the program was commenced in 13 pilot districts namely; Bungkum, Meenburi, Khlongsarm, Khannayao, Nongjork, Saphansoong, Ladkrabang, Donmuang, Laksi, Bangkhen, Saimai, Thonburi, and Jomthong. The project was then expanded to include other areas on 1 January 2002 and has been implemented to cover the whole country on 1 April 2002.

So far, there were quite a number of people have been utilizing the service under the universal coverage health insurance project. It has drawn the researcher's attention to examine the extent of service quality of this project and its achievement. The service quality includes the ability to respond to the needs and expected services of the clients. However, most of the medical services are specified by the service providers because the clients might not be aware of their actual health problems and needs. Hence, they understand that the assessment of medical service quality relies on health provides' definition and judgement. In fact, the health beneficiary is the client themselves, therefore, they should be the ones who make the judgement on such service if and to what extent it responds to their needs.

In view of this crucial issue, the researcher carried out a study on the evaluation of the service quality of the universal coverage health insurance project based on the patients' opinions. Nonthaburi province was selected as the case study since it is one of the pilot provinces enrolled in this project in phase 2. As of 31 May 2001, there were 373,808 people registered and who had received gold cards (Nonthaburi Provincial Health Office, 2001). In the researcher's opinion, Nonthaburi province has a level of potential and preparedness in terms of medical doctors and nurses as well as its service system to support the implementation of this project.

The research question of this study is "How is service quality after the universal coverage health insurance has been accessed by the non-health insurance people?" The clients' opinion can partly indicate and measure the quality of service, reflect the service problems, and provide guidelines for solving service problems that are responsive to the clients' needs.

1.2 Research objectives

1.2.1 To compare individual characteristics effecting evaluation of service quality.

1.2.2 To compare the services expected and received services by patients in relation to the services under the universal health insurance policy.

1.2.3 To examine the relationship between expected and received services with the evaluation of service quality.

1.3 Scope of research

1.3.1 The research area is government hospitals in Nonthaburi province enrolled in the universal coverage health insurance project.

1.3.2 The study population are the out-patients visiting government hospitals in Nonthaburi province under the universal coverage health insurance project.

1.3.3 The duration of the research study was 19 months (August 2001 to March 2002).

1.4 Limitations of the research

Due to limited time and budget, repeated visits could not be carried out to examine the quality of the medical services and the treatment results. Hence, the dependent variable used in this study for examining the service quality were the clients' feeling towards service system, service behavior, their satisfaction, and their recommendation to others.

1.5 Definitions used in the research

Universal Health Insurance means the government policy in providing health insurance to the Thai people to ensure that once they are ill, they are entitled to seek medical and counseling services, receive treatment and medication at no cost. At this stage, the 30-Baht treatment coverage was introduced and implemented to cover those

non-insurance people, i.e. every client pays only 30 Baht for each hospital visit to receive health care and treatment regardless whether having or not being admitted to hospital, and without any additional cost. (Office of Health System Reform Project, 2001: 3).

Out-patient means those visiting hospital for medical care and treatment and utilizing the universal coverage health insurance card. The clients should be over 15 years of age and registered as out-patients. After receiving such services, they return home, taking pills by following medical instruction.

Expectation of out-patient service quality means needs, feeling and opinion of out-patients utilizing the universal coverage health insurance card towards service quality of the hospitals in terms of what they should have and should be, or what should be provided. Factors effecting the out-patients' expectation are categorized as follows:

- (1) Service system, i.e. clear communication system, adequate number of personnel, medical equipment, place and waiting time of each visit.
- (2) Service behavior, i.e. providing knowledge and treatment in terms of providing information, personality, equality, and treatment ability.

Perceived service quality of the out-patient means expression of thoughts and feeling, knowledge and understanding of the out-patients after receiving hospital services in particular care and treatment, client assistance, including health care service needed by the patients. The perceived service quality is measured by using the following criteria:

- (1) Service system including the distinction of communication system, adequate number of personnel, medical equipment, place and waiting time of each visit.
- (2) Service behavior including provision of knowledge and treatment in terms of providing information, personality, equality, and treatment ability.

Service quality means the feelings and thoughts of the out-patients after receiving the service and the patient's satisfaction towards overall hospital services

which can be evaluated from the service system, i.e. clear communication system, adequate numbers of personnel and medical equipment, place and waiting time of each visit, service behavior which includes provision of knowledge, information and treatment, personality, equality, professional ability, and client satisfaction, including intention to revisit and recommendation to others.

Individual characteristics of patients means personal quality of the clients, i.e. sex, age, education, income, and experience in utilizing hospital service

Age means complete age of the client

Education means highest educational level of the clients

Income means the amount of money the client received from the main and minor occupation in each month

Experience in utilizing hospital service means the clients use of hospital services as an out-patient by using the universal health insurance card.

1.6 Variables

1. Independent variables

1.1 Factors on individual characteristics

- Sex
- Age
- Education
- Income
- Experience in utilizing hospital service

1.2 Expectation of service quality

Factors on service quality include:

- Clear communication system
- Adequate numbers of personnel
- Medical equipment
- Place
- Waiting time of each visit

Factors on service behavior

- Provision of information
- Personality
- Equality
- Professional ability

1.3 Actual service received

Factors on service quality include:

- Clear communication system
- Adequate numbers of personnel
- Medical equipment
- Place
- Waiting time of each visit

Factors on service behavior

- Provision of information
- Personality
- Equality
- Professional ability

2. Dependent variables is hospital service quality

Table 1: Variables and level of measurement.

| Variables | Level of Measurement |
|--|----------------------|
| 1. Independent variables | |
| <i>Individual characteristics</i> | |
| - Sex | Group |
| - Age | Interval |
| - Education | Group |
| - Income | Interval |
| - Experience in utilizing hospital service | Group |

Table 1: Variables and level of measurement. (Continued)

| Variables | Level of Measurement |
|--|----------------------|
| <i>Expectation of service quality</i> | |
| Service quality include: | |
| - Clear communication system | Interval |
| - Adequate numbers of personnel | Interval |
| - Medical equipment | Interval |
| - Place | Interval |
| - Waiting time of each visit | Interval |
| Service behavior | |
| - Provision of information | Interval |
| - Personality | Interval |
| - Equality | Interval |
| - Professional ability | Interval |
| <i>Actual service received</i> | |
| Service quality include: | |
| - Clear communication system | Interval |
| - Adequate number of personnel | Interval |
| - Medical equipment | Interval |
| - Place | Interval |
| - Waiting time of each visit | Interval |
| Service behavior | |
| - Provision of information | Interval |
| - Personality | Interval |
| - Equality | Interval |
| - Professional ability | Interval |
| ❖ | |
| 2. Dependent variable | |
| Quality of hospital service | Interval |

1.7 Conceptual framework

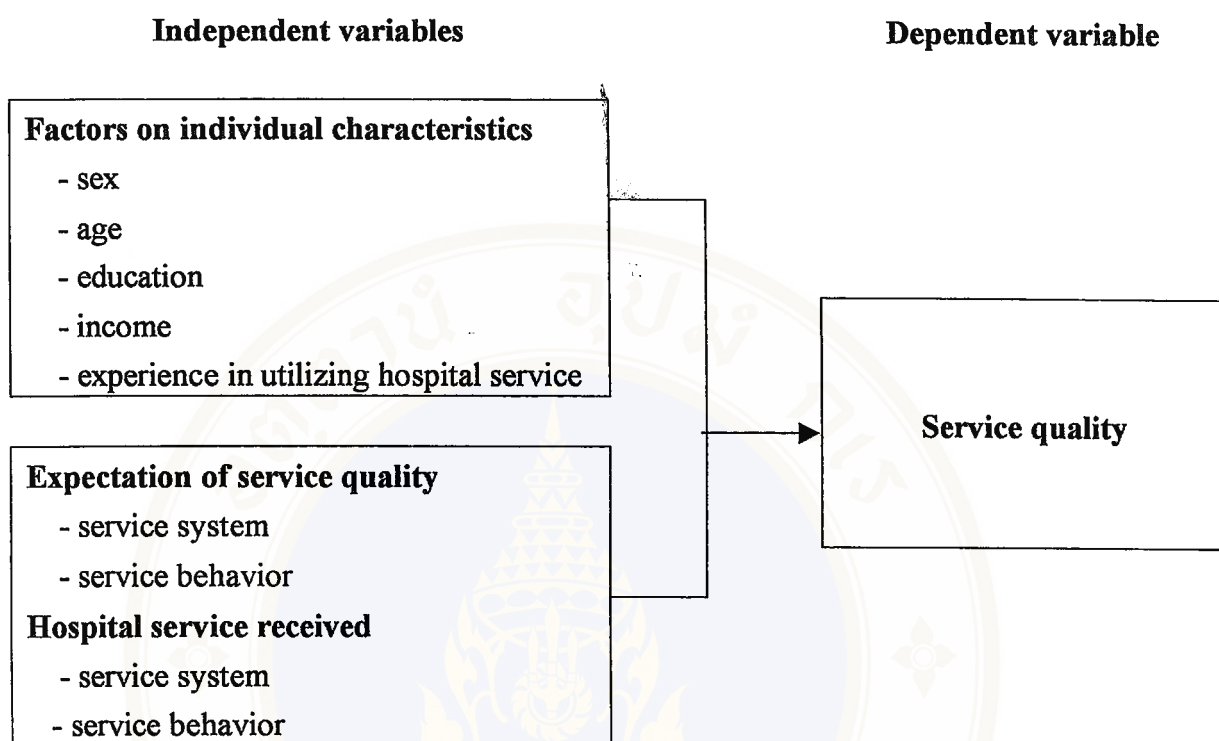


Illustration 1: Conceptual framework

1.8 Research hypotheses

1.8.1 Individual characteristics effect evaluation of service quality.

1.8.2 There is a difference between expected services and actual services received.

1.8.3 Service quality is associated with expected and actual services received.

1.9 Expected outcome

1.9.1 Knowledge of individual characteristics of the out-patients who received government hospital services in Nonthaburi province under the universal coverage health insurance project.

1.9.2 Knowledge of the differences between individuals that effects the evaluation of hospital service quality.

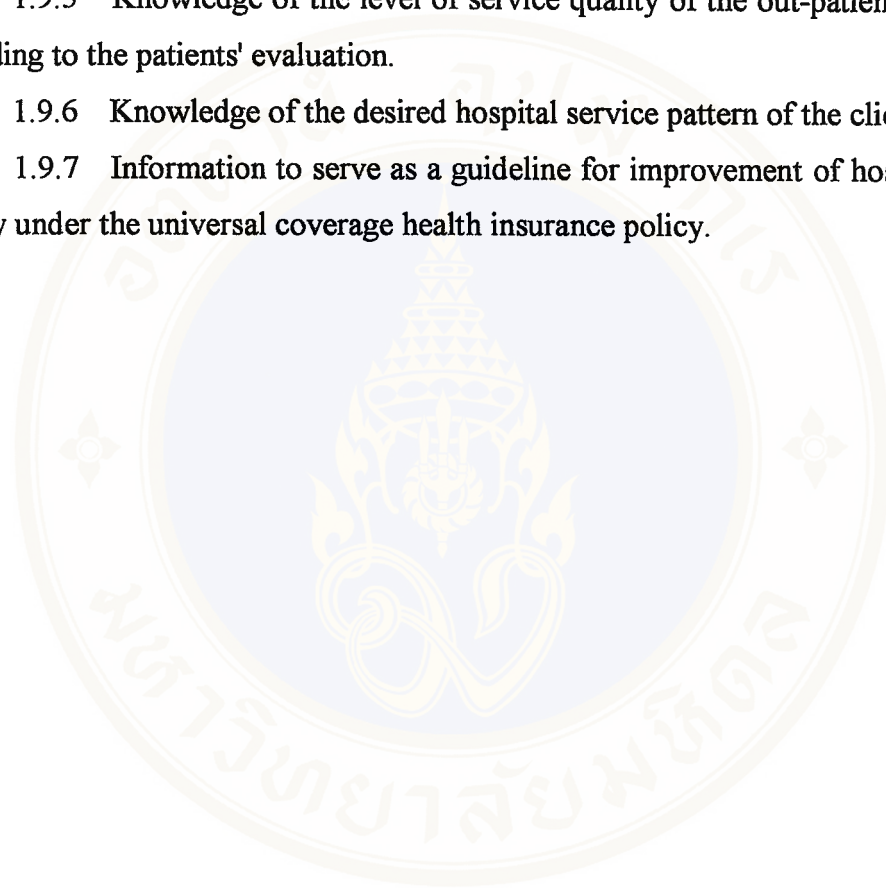
1.9.3 Knowledge of clients' expectation towards services received that effects the services under the universal coverage health insurance policy of Nonthaburi province.

1.9.4 Knowledge of the association between expected / actual services and the evaluation of the service quality.

1.9.5 Knowledge of the level of service quality of the out-patient department according to the patients' evaluation.

1.9.6 Knowledge of the desired hospital service pattern of the clients.

1.9.7 Information to serve as a guideline for improvement of hospital service quality under the universal coverage health insurance policy.



CHAPTER II

LITERATURE REVIEW

The researcher had reviewed the concepts, theories, and related research about the evaluation of public health service quality of the government hospitals in Nonthaburi province under the universal coverage health insurance project, and the review is presented in five sections issues as follows:

- 2.1 Concept of public health service quality.
- 2.2 Concept of universal coverage health insurance. (30-Baht coverage treatment)
- 2.3 Concept of evaluation of government hospital service quality.
- 2.4 Concept of public policy.
- 2.5 Research related to the variables

2.1 Concept of public health service quality

During recent years, various organizations in Thailand have been increasingly encouraged to improve and maintain their service quality due to strong business competition. Lack of attention to service quality might result in a negative image for the organization and the customers would thus have a bad impression and would not recommend others to try the service.

Hospital image is important for clients and a good image would include high standards and excellent services. Hospital services are guaranteed by the clients who are important customers of the hospital.

General definition of “Quality”

The word “Quality” is perceived as a good or useful thing. However, to define the meaning of “Quality” is not easy. A number of experts had defined the meaning of ‘Quality’ as follows:

“Quality” means “Excellence” in both subjective and objective aspects. Objectively, quality can be evaluated from its type and number of equipment, building and place, number of personnel and training experience (Supchutikul, 1998: 24). Subjectively, it might be evaluated from the clients' satisfaction and intention to use the service (Nananukul et.al, 1995: 103-106).

Crosby (cited in Srirattanaban et.al, 2010: 2) defined “Quality” as a response to need. Hence, quality could be attained if it is consistent to the specified standard. CCHSA (The Canadian Council of Health Service Accreditation) (cited in Supchutikul, 1999:12-13) defined “Quality” as doing things right, well, and satisfying customers. The dimensions of the quality of patient care and treatment take into account the following:

1. Competence: If the knowledge and skills of service providers are suitable to their duties, and if evaluation is regularly undertaken.
2. Acceptability: If each activity responds to expectations of the clients, their family, service provides and those who pay for the service.
3. Effectiveness: If the treatment or service increases survival rate or quality of life.
4. Appropriateness: If the treatment and care are correct and appropriate.
5. Efficiency: If the resources (time, testing, equipment, place) are most economically used to yield desirable outcomes.
6. Accessibility: If the service is provided in the right time and place that offer easy access to clients.
7. Safety: If there is a preventive system to minimize risks, and if risk is explained to the clients and family.

It can be concluded that the quality of a hospital means the process by which the hospital is able to respond to client's need, and such service has met the defined standard and satisfies clients and that they intend to revisit the hospital when they have a need.

Public Health Service

The World Health Organization defined "Health" as "a condition of complete physical, mental, and social well-being, and not merely the absence of disease or disability" Therefore, it is crucial to provide public health services to achieve health objectives as stated.

Public health services defined by the Ministry of Public Health means any activities of health services including at least four aspects: health promotion, prevention and control of disease, medical treatment, and rehabilitation. These meant to bring about good health to the people (Ministry of Public Health, 1992:13).

Public health service or health care service is to provide public health service of various forms in order to solve the problems and to respond to the health needs of the people, and to improve the health conditions of the people upon the basis of good health, i.e. having complete physical and mental health and absence from disease. The government has to put an effort to provide coverage health service to the people in both urban and rural areas, the rich and the poor, and to encourage people to take care of themselves, their family, and community (Kanchanaburanon, 1983: 65).

The Ministry of Public Health has important roles and duties in provision of public health services which include promoting, supporting, controlling and coordinating all activities related to physical, mental health and social well-being, as well as providing health services to the people, with four important objectives.

1. To bring about the complete physical, mental and social well being to the Thai people.

2. To promote the Thai people to live without disease and suffering from the disease that causes loss of working ability or disability, through disease prevention, early diagnosis, detection and treatment, elimination of disability and rehabilitation.
3. To promote longevity and prevent premature death among the Thai people.
4. To guard against various health hazards such as toxicity of the environment, food and drug (Kanchanaburanon, 1983: 65).

Good health or public health service system requires cooperation from all sectors. Technically, a good service system consists of three characteristics (Vasi, 2000: 22):

1. Equity
2. Quality
3. Efficiency

Equity means the system in which the people regardless of their status equally access necessary service. It must not be a poor but a quality service that is provided with hospitality, honesty, technical accuracy, reliability and accountability that bring about trust and wellness without worrying about poor quality or deceive. While efficiency means the cost-effective service system.

The Ministry of Public Health and public health experts defined the meaning of public health service as a government social service aiming at providing coverage and equal services in health promotion, disease prevention and control, treatment, and rehabilitation to every group of people at all levels regardless of their status, and with reliable and trusted quality. Such public health service must maximize people's health with limited resources, and improve physical and mental health well being of the people as well.

Public Health Service Quality

At present, the national public health system reform is underway, of which various rules and regulations are to be revised in response to the present situation and what would happen in the near future. Health facilities are to provide coverage and integrated services in line with urgent government policy, and can be relied upon by sick people when needed. Sanguan Nittayaramphong (1997: 27, 35) pointed out that a good public health service system has to have coverage and be sufficient. The ideal public health service system of the middle path should be based upon people's need, with nine characteristics. (or called Nawalak);

1. Every person has access to standard services as a basic principle appears in the current constitution. Every person should also receive services of the same quality, including attention and care and necessary information to ensure people's satisfaction with the health service.
2. The public health service system should have efficiency. Good health services should be provided free of charge, while maximizing better health upon limited resources.
3. A good health service system should take care of the "people" not the "disease", i.e. taking care of overall health continuously.
4. The ideal health service system should be able to adjust to a changing environment, while promoting competition and cooperation among service providers with an aim to provide best service to the people.
5. A good health service system should vary to ensure that the people receive comprehensive services and have more opportunities and choices so that they are most satisfied.
6. The people should have suitable alternatives of service that they decided by themselves in suitable area which are agreed to by Thai society.
7. A good health service system should have responsibility and accountability in terms of quality, utilization of resources, and cost effectiveness so that such services could be improved, effectively implemented, and be systematically monitored.

8. The people should be involved in improving the service system since the ultimate goal of the service is the people themselves. Building a good health service system should mobilize people's participation to take roles in developing a better health service system.

9. An advanced knowledge base is continuously developed by those directly involved in the system, including the service clients and service providers, i.e. doctors, nurses, and other medical personnel. Updated knowledge in medical and management areas is available for reorientation of the service system to the changing environment. In addition, the knowledge base on economic, appropriate and effective technology at least cost, as well as social science, should be used to create satisfaction among the clients.

These nine characteristics, or Nawalak, should be combined to generate the ideal public health service system that is accountable to the public, generates satisfaction among clients, and impresses the public.

Client's opinions and satisfaction with service quality are increasingly important for both the doctors and the clients. David Blumental (1996: 891-893) stated that the public health service quality could be measured in two dimensions:

1. Providing appropriate service, i.e. awareness of responses and objections to the needs of the clients in consideration of the clients' opinions, and that the clients are important in identifying the service quality.
2. Providing skilled service, i.e. applying services with less time while increasing service quality.

The Joint Commission on Accreditation of Healthcare Organization (JCAHO) (cited in Srirattanaban et.al, 2001: 9-11) states that quality public health services should take into consideration the views of various stakeholders who are involved in providing health services. In 1989, the Joint Commission on Accreditation of Healthcare Organization (JCAHO) summarized 11 indicators of the quality of patient care service as follows:

1. Accessibility of care means easy access of necessary medical care and treatment by the patients.
2. Timeliness of care means preparedness of care for patients when needed.
3. Effectiveness of care means a treatment utilizing arts of manner and science in providing services.
4. Efficacy of care means the potential services that meet the clients' need.
5. Appropriateness of care means the service that meets the needs of the clients.
6. Efficiency of care means the treatment that yields expected outcomes with less cost or least damage.
7. Continuity of care means the treatment that is continuously coordinated among related personnel in the organization.
8. Privacy of care means the treatment that takes into account the patient's rights such as dissemination of illness history of the patients by health professionals.
9. Confidentiality of care means keeping confidentiality about personal information of the patients and not disclosing this information to others without consent.
10. Participation of patient and patient family in care means the treatment that allows the patients (or relatives) to be involved in decision-making regarding their illness.
11. Safety of care environment means preparation of essential place and tools and readiness to provide timely service when needed.

It can be concluded that the quality of the public health service is the service that people in any part of the country are able to access with coverage, equity, and equality and as stated as a basic principle in the current constitution. Service facilities have to provide integrated services including health promotion, disease prevention and control, curative services, and rehabilitation, i.e. treat the "people" not the "disease". In addition, such services create new choices for people. Moreover,

health service quality should not take into account only the provider's perspective but should take into consideration the client's perspective as well as other stakeholders so as to directly reflect the quality of services.

2.2 Concept of universal health insurance (30-Baht treatment coverage)

Universal health insurance is the government policy that aims at insuring that the Thai people are able to seek treatment, counseling, and medication when they are ill without cost concerns and no lack of opportunity to be treated. The government will subsidize the treatment expense as specified (Office of Health Service System Reform, 2001: 3). In addition, it also emphasizes health promotion and prevention as necessary. The government has established the 30-Baht coverage treatment project to provide health insurance for those without any health insurance so that they are able to receive health service without worrying about the cost. The Thai government has declared the universal health insurance policy to the Cabinet, in the General Notification, Volume 118, Special Part 21d. dated 2 March 2001 concerning the urgent policy to establish universal health insurance with 30 Baht paid at each visit, and to create the opportunity to access standard, broad and equal health services (The Royal Gazette, 2001: 5).

The government has attempted to establish a health protection and service system to bring health for all to the Thai people through health system reform in order to reduce overall health expenditures of the country, and to reduce health care spending of the people, as well as to establish health insurance and create people's opportunity to access health services. In addition, the National Health Insurance Fund was established and the National Health Insurance Law was promulgated in order to improve efficiency in use of the health budget and reduce the public burden in spending for health care. The Health Ministry's Regulation on Universal Health Insurance B.E.2544 in the Royal Gazette, General Notification, Volume 118, Special 31 d, dated 2 April 2001 has been effective since April 2001 and has been enforced in the areas of Pathumthani, Samutsakorn, Nakornsawan, Phayao, Yasothon, and Yala provinces (The Royal Gazette, 2001: 7).

Subsequently, the government promulgated The Health Ministry' Regulation on Universal Health Insurance B.E.2544, The Royal Gazette, General Notification, Volume 118, special Part 57 d, dated 18 June, which has been effective since 1 June 2001. This regulation has been enforced in the areas of Nonthaburi, Sakaew, Saraburi, Petchburi, Nakorn Ratchasima, Surin, Nongbualamphoo, Ubon Ratchathani, Amnartcharoen, Sisaked, Sukhothai, Phrae, Chiangmai, Phuket and Narathiwat provinces (The Royal Gazette, 2001: 7). Those who are entitled to the service under the universal health insurance are the people whose names appeared in the housing registration in the above-mentioned areas. The health insurance cards are issued to those who submitted the housing registration and identification cards or other relevant official evidence to their respective government hospitals or health centers.

Objectives of the universal health insurance (Office of Health Service System Reform Project, 2001: 15-16)

1. Equity

Every person has equal rights to receive treatment without any form of discrimination or double standard, as well as to share responsibility to pay to the health insurance fund on an equity basis with the mode of payment that creates no trouble to any particular individual or groups.

2. System Efficiency

Health systems require good management, i.e. minimum use of resources with maximum cost efficiency but not reducing service standard, while providing easy access to service, providing a variety of choices, managing non-redundant and standard services for both service providers and clients. Such services should focus on primitive and preventive measures to reduce morbidity and overall national health expenses. Inspection system and authority are concisely specified with active involvement and control of the people. Specific roles of the health insurance fund manager, the users and providers are clearly defined. Efficient technology for service system management is utilized for budget allocation, payment, audit, and service quality development. Mode of payment for service providers should be accountable, and controllable to yield curative efficiency and to prevent improper prescription of service providers to take advantage from the health insurance fund.

3. *Alternatives of service use*

Every people should have opportunity to choose any types of service that is not limited to those of the government. Various types of health services should be made available including the services of the private sector, however with control of appropriate standard of service.

4. *Sustainable good health*

Universal health insurance is the beginning of health for all which provides not only the insurance of treatment cost but also provides health promotion, disease prevention, and rehabilitation services.

Principles of the universal health insurance (Office of Health Service System Reform Project, 2001: 12-14)

1. *To reduce cost concerns when seeking medical treatment.*

As a natural part of life, illness is unavoidable. People can see a doctor and buy medicines (with reimbursement), have proper treatment, and spend more time consulting with the doctor.

2. *To create equality, i.e. every person has equal rights to receive health benefits and standard service without discrimination.*

No one wants to receive poor or 2nd class medical service. Everyone prefers equal medical treatment, with the same and standard medication. Hospitals cannot refuse clients just because each health insurance scheme makes different payment to the hospitals. Health expenditure per person by health insurance schemes in Thailand is shown in Table 2.

Table 2: Health expenditure per person by health insurance schemes in Thailand

| Health Insurance System | Expense (Baht)/ Person/Year | Number (in Million) |
|--|--|------------------------|
| 1 Officials' welfare paid to the hospitals by the government | 2,106 | 7 |
| 2 Social Security paid to the hospitals by the Fund | 1,290 | 5.42 |
| 3 500-Baht-insurance card (voluntary) paid to the hospitals by the government | ~ 250 (Plus 500 Baht paid for the health card) | 7-8 |

| | Health Insurance System | Expense (Baht)/ Person/Year | Number (in Million) |
|---|---|--|--------------------------------|
| 4 | Low income card, paid to the hospitals by the government | ~ 363 | 23 |
| 5 | Private Insurance | ~ 1,600 | 5.9 |

Source: Office of Health Service System Reform Project, 2001:12-13

3. *To accord to the principles and civic rights provided in Constitutional Law.*

Individuals are equal by law, societal norms, and the principle of human rights. Discrimination based on differences of birthplace, race, language, sex, age, physical condition, health, individual and socio-economic status, religious beliefs, education, or political opinion is prohibited.

The rights to receive health services as stated in the Constitution are as follows:

3.1 Equal access to health services. Economic status is not an obstacle for health service access.

3.2 Health service facilities are to meet standards.

3.3 The private sector and local administrative organizations are allowed to take part in providing health service.

3.4 The government has an important duty in prevention of harmful infectious diseases without charge.

4. *To make hospital treatment not something that relies on faith (i.e. meet good people, good doctors, good hospitals), or relies on opportunity (i.e. have work and money or no other family members who are ill), or on discrimination due to the type of health insurance schemes participating in.*

Universal health insurance is a right provided by the government, and not based on faith, opportunity, or discrimination to be or not to be provided on a paid basis.

In conclusion, universal health insurance is the government policy to insure those people without insurance so they can receive medical treatment with a 30-Baht-

fee paid per visit. The government aims to create equality among people in terms of receiving equal service of the same standard as a principle of civic rights in the constitutional law. Moreover, the government offers both the private and public sectors the opportunity to gradually become involved in providing health services in order to generate competition and cooperation. One important aim is to enable people to have access to efficient and quality services, and subsequently increases their satisfaction.

2.3 Concepts related to evaluation of government service quality

Evaluation of service quality of health facilities is a key to service quality to guarantee if the service quality of such health facilities is good. Evaluation of service quality is necessary and useful, and can be evaluated by the patients' perception towards the service. The patients' opinion is important as a tool to measure service quality since it reflects the success of a hospital in responding to the clients' need. However, evaluation of service quality is more difficult than to evaluate products or goods because service quality cannot be judged through physical appearance (Phanthubanyong 1993: cited in Duangden, 1996 : 14). William (1994: 509) supports evaluation of service quality by patients, and also proposed a clear understanding regarding the method of evaluation by patients. Studies should be carried out to find what medical service characteristics patients pay attention to. Importantly, the evaluation should be accurate, reliable, and acceptable for further application (Wensing, .et. al, 1994: 45)

Technical experts have proposed various concepts in several models of evaluation of service quality of medical treatment as follows:

Model 1

Scardina (1994: 38-46) proposed a model of evaluation of service quality that includes:

1. Tangibility, i.e. medical devices, equipment, and communication.
2. Reliability, i.e. ability in providing quickly, correctly, and suitably services.
3. Responsiveness, i.e. preparedness in providing service that meets the patients' need.
4. Assurance, i.e. the knowledge, personality of service providers and their ability to entrust the patients.
5. Empathy, i.e. caring and paying attention to all patients.

Model 2

Chang (1997: 29) proposed another model of evaluation of service quality as follows:

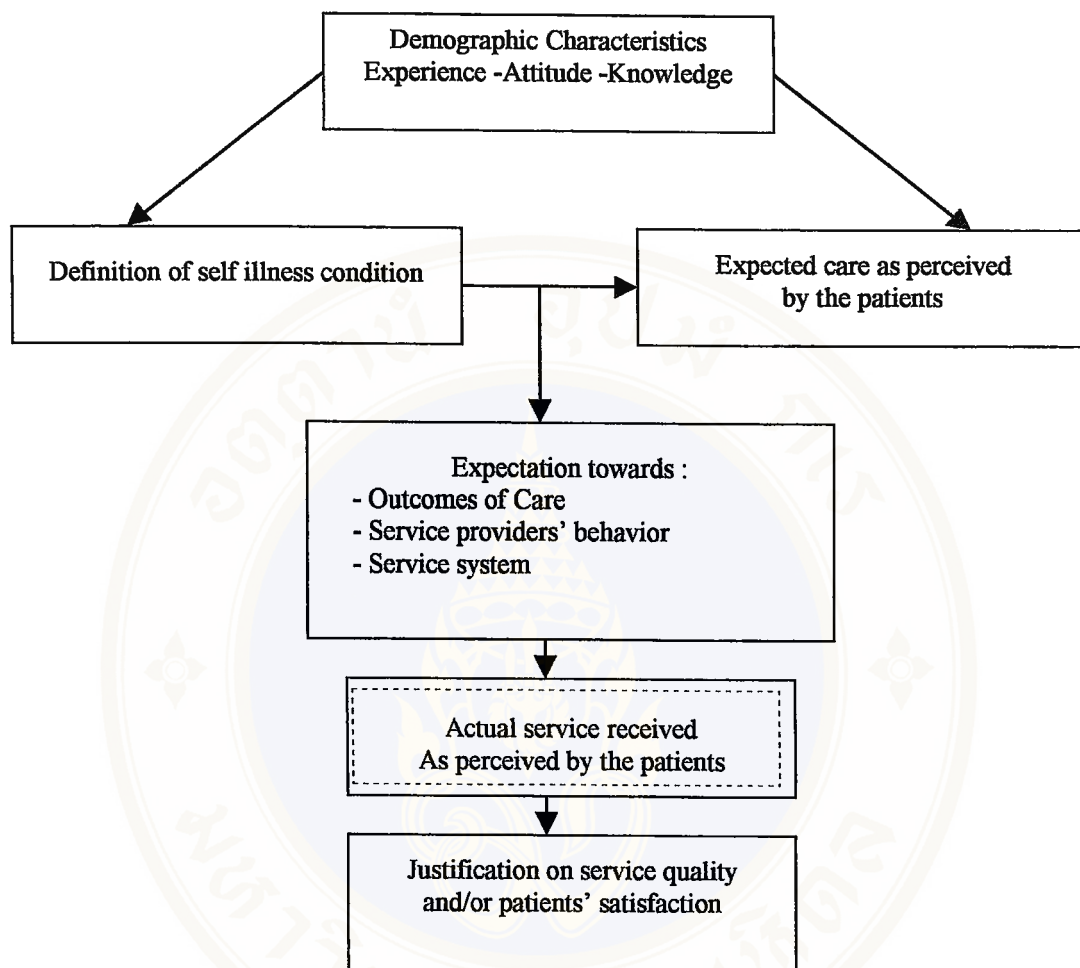
1. Physical environment, i.e. keeping the service place clean, controlling for sound, air, light, and temperature.
2. Availability, i.e. ability to make a prompt response to patients' needs in a timely manner with suitable service.
3. Technical skills i.e. response to basic needs of the patients such as food, hygiene, toilet, and including quality care process such as treatment, vein medication, wound dressing, use of medical devices, skills, accuracy, and safety.
4. Art of care, i.e. personality, friendliness, attention, listening to patients' opinion on the treatment, suitable time use, respect and ease.
5. Explanation of care, i.e. introducing the place and treatment plan as well as its result, advising home patient care to the relatives.
6. Continuity of care, i.e. the care given by the same officer who understand the condition and needs of the patients.
7. Specific outcomes of care, i.e. the patients' feeling after receiving treatment, feeling better, and understanding the illness condition.
8. Overall quality, i.e. all satisfaction or quality.
9. Future intent, i.e. intention to revisit for future treatment and recommendation to relatives or friends.

Model 3

Oberst (1984: 2366-2367) had proposed a model of evaluation of quality of care and treatment by using the concept of expectation and actual service received as perceived by the patients. Oberst stated that once patients enter the health care system they had different expectations resulting from their socio-demographic characteristics, knowledge, attitudes, past experience and information received from medical personnel. Thus, patients defined their own illness condition and expected treatment and its result. They also have expectations of the behavior of service providers and service system. After treatment, patients evaluate service quality by comparing expected and actual services received. If they feel that the actual treatment received is less than expected, they are unsatisfied and assess such service at a low level of quality. On the contrary, if the actual service were equal to or more than the expectation, they would be satisfied and assess it as high quality, as shown in Figure 2.

The model of Oberst can be summarized as the quality of services are decided by comparing the expectation of the patients and the awareness of care which the patients received by examining the difference between the service received and the expectation which they had in relation to the the definition of their sickness, the demand of care according to the patients' awareness, characteristics of population, and the patients' experience, attitude, and knowledge. This model is shown in Chart 2.

Illustration 2: Oberst’s conceptual framework (Oberst, 1984: 2367)



In conclusion, if the patients perceived good and quality service, they feel satisfied, and will revisit, and recommend the service to their relatives and friends. In this study Oberst’s concept on evaluation of service quality is applied to describe and evaluate the out-patient service. In addition the concepts of technical experts and the concept of universal health insurance are used to specify variables employed in the study.

2.4 Concept on public policy

Activities at any level in organizations originate from ideas that guide what, when, where, how to do, and by whom. Without clear ideas, subsequent actions would have unclear direction (Yawapraphart, 2001: 1). The planned action or policy is used

in several meanings (Palmer; Short., cited in Supchutikul, 1998: 14) characterized below:

1. Policy is the message of direction or attention to be carried out in the future, for example, policy of political parties.
2. Policy is the result of decision making that brings about tangible practice, for instances, issuing laws, enforcing tax and financial measures, and approval of programme/project/budget/set of plans/projects.
3. Policy is the rules and position that control decision making or practice of the government, organization, or the communities. It might be in the form of government policy.

Public policy is crucial because it provides the guidelines for administrating the country and this has a direct impact on the whole 62 million Thai people. A number of academicians and experts defined “public policy” differently. Some are presented as in the following.

Thomas Dye (1972, cited in Thanaphongsathorn, 1991: 7) defined the word “public policy” as being concerned with the issue of what government has to do, why it has to do it, and what the difference would be by doing it. Hence, public policy is whatever the government chooses to do or chooses not to do.

David Easton (1971, cited in Yawapraphart, 2001: 2) defined “public policy” as the provision of benefits or valuable things between individuals and various beneficiaries in the system of political society.

James Anderson (1970, cited in Thanaphongsathorn, 1991: 6) defined “public policy” as the course of action of the state related to specific issues such as poverty, industrial monopoly or the price of agricultural products, etc. Since public policy is concerned with the course of action of the government, it is thus concerned with at least two aspects:

- (1) It must be concerned with the decision making of the government to take action or not to take action, and

(2) It must be concerned with any actions that were taken or not taken as decided in (1).

Amorn Raksasat (1975: 19) explained the word “policy” in two meanings. In a narrow aspect, it means the principles and strategy leading to the achievement of specified goals. In a broad aspect, it includes the decision making to determine the goal. To make clear the understanding of policy, Amorn Raksasat characterized the meaning of “Public Policy” as follows:

- (1) Determination of the goal to be attained;
- (2) Principle and strategy to attain the goal; and
- (3) Preparation of various efforts to be taken according to the principle and strategy.

According to the above definitions, a number of technical experts have defined “Public Policy” as guidelines for implementing government actions according to the planned goal and methods in order to achieve the public policy in response to overall public and social need.

Policy-Making approach

Policy-Making Approach is the analytical framework of the government used to study the process of policy formulation. Such policy reflects political image how, when and to whom the resources are allocated to the society. Moreover, who will gain or lose benefits from such policy practice. In addition, how those who are impacted by the policy have approached policy makers on the matter.

William W. Boyer (1971: 120) classified the process of determining public policy in western democratic society into five steps:

Step 1: *Proposing policy initiatives* Those who propose policy initiatives may be an individual or a group of individuals, generally they are the House of Parliament, Government (Cabinet), permanent officials, and beneficiaries.

Step 2: *Drafting the initial policy* This is the step of transferring the initiative into initial policy. The draft policy is made by the officials in the organization or by committee.

Step 3: *Public participation in determining the policy* Before proposing the draft policy to the policy maker, the draft committee should find out whether the public accepts it. This can be done through public hearings or in written format, etc.

Step 4: *Final drafting* The draft committee compiles public opinion and improves the draft policy, and proposes the complete draft policy to responsible individuals or organizations for policy promulgation. At this step, some adjustment and change can be made before promulgation.

Step 5: *Processing and reviewing the policy* This step aims to find problems, constraints, and defects of the policy for further improvement.

Kulthon Thanaphongsathorn (1979: 248-249) explained a policy formulation process comprising seven steps as follows:

1. ***Consideration of problems*** This step is to consider what problems need to be solved by policy. Policy makers need to find and compile existing problems and prioritize what needs to be solved, then decides to choose such problems.

2. ***Proposing initiatives*** This step is to propose options for solving problems by those of political concern or permanent government officials or any individual.

3. ***Searching for information*** Accurate existing social information is compiled to ensure that the concept and options are practical

4. ***Drafting initial policy*** This step transfers the initiative into policy that can practically solve the problem by drafting a rough initial policy that can be revised later on.

5. ***Revision of draft policy*** Once initial policy is drafted and prior to promulgation, the policy makers should take into account the opinion, attitudes, and reaction of the public and social groups whether they accept the draft policy.

6. ***Determining policy*** After revision of the draft policy, the policy maker determines the final policy.

7. *Policy promulgation* The final policy is promulgated and announced to the public. This step is the beginning of transferring policy into practice.

It can be said that these steps described above are to systemize the process, but in practice, not all steps might be followed. However, one important step of policy formulation is compiling information, and considering public opinion. In this study, the researcher uses the guidelines of Phatcharee Sirorot (1991: 59-70) who classified the process of policy formulation in the Thai society based on the initial hypothesis that the process of policy formulation is not only a technical concern but is also a political concern at every step, with five steps as follows;

1. *Identifying and defining the problem* This is the basic step of the political process to seek alternatives for policy formulation, bringing policy to practice, and policy evaluation. However, the process of identifying, defining, and presenting problems to policy makers are undertaken by political and economic elites, while most of the public are not involved in policy formulation and management. This causes social weakness and reduces ability to examine and monitor the implementation of policy and to have an explicit and tangible process of quality assessment.

2. *Presenting problems to policy makers* The first step involves presenting the situation interpreted as problems that can be presented to policy makers. This depends on who perceived such problems, and the number of impacted individuals among policy decision makers, how policy makers respond to those impacted individuals, how those political leaders with high level of involvement in policy formulation are selected -- by election or overtaking -- and the extent of their political support. Generally, the policy formulation process is associated with the political system.

3. *Policy and policy recommendation formation* Once policy issues are brought into the decision making process, concerned persons in the government would jointly consider the problems by studying information from both documents and outside individuals. Then they interpret policy implementation strategies and prepare policy recommendations, and coordinate to seek supporting votes. In the case of the universal health insurance policy, for example, The Thai Ruk Thai Party was the

leader to present such policy by means of “*30-Baht Coverage treatment*”. Political support is an important factor that pushed the universal health insurance policy to reality. It was meant to solve the problems for the 20 million Thais with no health insurance people.

4. *Transfer of policy into practice* This step involves those who would gain and lose benefits from such policy, and how the government find means to coordinate all concerned groups for such benefits so as to continue the policy towards the goal. Regarding the success or failure of policy implementation, Woradej Jantharasorn (2000:9-17) pointed that it depends on factors of policy context and environment in which the policy is implemented. The context would determine “Who or Which organization” is responsible for policy implementation because each organization differs in preparedness. At present, the universal health insurance policy is extended into other provinces throughout the country to cover those in other health insurance schemes to pursue their rights when holding the gold health insurance cards under this project, except in Bangkok where pilot project was implemented in 13 out of 50 districts. The Ministry of Public Health is the focal point in implementing this policy.

5. *Policy evaluation* This step involves the study the success and failure of the policy for further implementation or termination. Good evaluation requires a clear process, without any bias of the evaluator. Evaluation measures depends n policy objectives. An economic project is easy to evaluate due to having clear evaluation tools. Whereas problems may occur in evaluation of the social project since its objectives may not be fully agreed upon, hence evaluation is rather complex and depends largely on the evaluators. Usually evaluation of public health policy, especially medical services, is determined by service providers related to the organization. As a result, perceptions of service problems is one sided, which might effect evaluation objectives, and evaluation result might not reflect the situation of problems and the clients needs.

In conclusion, the policy formulation process reflects the structure of social power and involves who has real power, who loses and gains benefits, how the

government coordinates the benefits of those beneficiaries to maintain the equity of the social and political system.

Policy formulation of the government is related to the plan of action to be implemented in the future with the aim to bring about the well-being of the nation and the people. In the current government policy, the trend of policy is urgent i.e. the universal health insurance policy. In to reduce the overall health expenditure of the country and the people to pay only 30 Baht per each visit. This research aims evaluate the service quality of the hospitals under the universal health insurance project, which has been implemented throughout the country. The focus is on the extent of service quality of the project. Service quality is measured by the clients, who are the stakeholders and who are directly impacted through the project. The results of the evaluation are intended to serve as guidelines for further improvement of the project.

2.5 Related research

2.5.1 Related research

Kusol Sunthornthada and Vorachai Thongthai (1996) studied the characteristics of private service clients and factors determining service utilization by sampling from those utilizing three types of private service facilities: clinic, polyclinic, and hospital, obtaining 999 clients, 276 out-patients and 186 in-patients. The results revealed advantages of service quality of private facilities over government facilities in hospitality, waiting time, check-ups, convenience, attention, location, equipment, and quality of medical supplies. The one advantage of government services was cost of treatment, which is much cheaper in government facilities. Regarding the factors determining utilization of each type of service, it was found that factors determining utilization of out-patient service are illness type and duration, type of service facilities, and expectation of results. Factors determining utilization of in-patient services are cost of treatment, client occupation, and client status. With respect to factors determining types of service facilities used, it was found that less severe illness, cost of treatment, hired worker occupation, and trust of doctors are factors that effect

utilization of clinic services. Whereas expectation of the result effects utilization of polyclinic services. Factors determining utilization of private hospital services were reliability of the service facilities, cost of treatment, convenience commuting, and various benefits.

Yothin Sawaengdee (2000) studied the problems and constraints of people utilizing health service facilities by sampling from the clients of university hospitals, provincial center hospitals, general hospitals, community hospitals, private hospitals, private clinics, and health centers. A total sample of 1,437 was obtained. The results revealed that clients have problems with the service times specified by the doctors, as they were not able to negotiate the time, conflicts between the clients, and the impolite manner of the providers usually with the poor. The poor were discriminated against in services in public hospitals, which have a monopoly service for the poor. Moreover, the study among those with health cards suggested that clients also worry about receiving poor services as they thought they received low quality and cheap medicine, which may have caused inefficient treatment.

Rungnapha Yang-en (1999) compared hospital service quality as perceived by 400 in-patients among hospitals using and not using total quality management at different times. The results showed that hospital service quality as perceived by the in-patients overall and by 6 specific items was not different. There was a significant difference ($p < 0.05$) between service convenience and service tangibility. Hospitals with three years of using total quality management had the highest mean, followed by one year, and six years respectively.

Suangthip Wongphan (1998) studied the service quality as expected and perceived of clients in the out-patient department in government hospital in Suphanburi province. The results showed that the overall expectation and perception of service quality are at high and moderate levels with means of 5.88 and 4.80 respectively. There was a significant difference overall and by items for service tangibility, reliability, responsiveness to the clients, trust, and sympathy to the clients.



Moreover, it was found that there is a significant difference in client's expectation towards service quality.

Panbodi Ekajumpaka and Suthithum Watanamano (2000) evaluated client's satisfaction towards the service of health facilities under the Ministry of Public Health during the economic crisis. The sample of 2,923 clients comprised 2,177 clients visiting out-patient department in health facilities at the provincial level i.e. provincial center hospital and general hospitals, and 746 clients visiting community hospitals. It was found that the clients had high levels of satisfaction towards services at all levels in terms of convenience, provider's personality and attention, information obtained, and service quality.

Kanchana Butchon (1993) studied the present situation and expectation of nursing care of people in Roi-Et province under the health card project at all levels of service facilities. She found that overall, the situation of nursing care at the health center, community hospital, general hospital was significantly different ($p < 0.05$) from the expectations, i.e. the expectation were higher than the services received. For health center and community hospital, the expectations were high were the services received were at a moderate level. For general hospitals, expectations were is also high, and the situation of services was good. Respondents suggested that nursing services under the health cards project at the health center level should be improved by including better provision of medical and logistic supplies as well as health personnel. For General hospital, clients require fast services and politeness.

Wanrudee Phoothong (1996), studied the relationship between the nursing service quality management for the insurance clients with their perceived service quality of government hospitals in Bangkok. It was found that perceived service quality of the clients is at unsatisfactory level. The variables having significant ($p < 0.05$) positive association with the perceived nursing service quality are the focus of marketing research, identifying service standard, and providing suitable services to patients.

Ampha Deeseeparn (1996) conducted a study on the opinion of 190 clients under the social security scheme towards the out-patient nursing service system of Maharaj Nakorn Chiangmai Hospital. These clients had visited the clinics under social security service during March-April 1993. The result reported that their opinion towards the overall out-patient service system was at a moderate level. Their opinion on treatment service system was at a good level, while their opinion on counseling and waiting for examination were at moderate to good levels. Their problems about the services are impoliteness, lack of attention and advice from personnel, delay in services at every level due to insufficient personnel, small and non-separated waiting room, and the lack of through examination.

Urai Chamnankha et.al (1997) carried out a study on behavior of health personnel and client satisfaction after the use of Q.C. to develop public health service quality in Yasothorn Hospital. It was found that the clients' satisfaction was at a high level in terms of convenience, human relationships, medical service, service equality, coordination, and information received. Client satisfaction was significantly different ($p < 0.05$) in relation to occupation, monthly income, service location they and their families mostly used, section attended at the time, commuting time, and different time of out-patient visit. Those clients engaged in agriculture had a higher satisfaction level than government officials. The same result was found among the private employees and those with more than 6,001 Baht monthly income, and similarly to the out-patients than the in-patients.

Waree Wanichpanjaphol (1996) undertook a study on patients' expectation towards nursing service and perception of nursing executives towards the expectation of 400 out-patients and 400 in-patients. The questionnaire survey was used as a research tool, which was developed from the standards of out-patient and in-patient departments of provincial center hospitals and general hospitals under the Ministry of Public Health. The findings suggested that there was a significant ($p < 0.01$) difference on the perceived standard of nursing services expected and the perceived service after receiving the service. That is, the out-patients had high satisfactory level on every service, while the in-patients had moderate unsatisfactory level of every service.

Phanida Khamyu (1995) studied expected service quality from nurses and perception of the head of patient wards towards expected service quality in private hospitals in Bangkok. It was found that the expected services were at a high level in every aspect, i.e. service access, communication, nurse capacity, personality and friendliness, reliability and trust, responsiveness to the patients' need, security and safety, tangibility of the service, understanding and knowing the patients. The perception of the head of patient wards towards expected service quality from the nurse is at highest level in terms of reliability and trust, while the perception is at high levels for service access, communication, nurse capacity, pleasant personality and friendly, responsiveness to the patients' need, security and safety, tangibility of the service, and understanding and knowing the patients. In addition, there is a significant difference ($p < 0.05$) between expected service quality of the clients and the perception of the head of patient wards towards expected service quality of the clients in private hospitals in Bangkok. That is, perceived service quality of the head of patient wards towards expected service quality of the clients is higher than that of expected service quality of the clients.

Wirote Tangcharoensathien et.al (1996) conducted a study on hospital service quality according to the patients' opinion among nine public and private hospitals in 1995. He reported that about 58-97% of in-patients stated that they received information and understood laboratory examination result, the operation, the details of treatment and the disease. About 88% reported that receiving information about the operation, and 77% received information about laboratory examination results. 73% received information on the details of disease, while 62 % received information on patients' opportunity to make a decision on treatment method. About 41 – 53% knew the name of responsible doctor in public hospitals, and 76 – 91% in private hospitals. For in-patients, about 77 % said that the doctors clearly explained the details of disease, while 80% reported that the doctors clearly explained the practice. Whereas 69% received a clear medicine description from the drug dispenser. About 17 – 19% mentioned long waiting time, especially in the public hospitals.

There were 26 – 28% who said that the service and treatment cost of private hospitals was expensive. And 28% complained about the toilets of hospitals.

Phatcharee Thongphae (1997) studied nursing service quality as perceived by in-patients in community hospitals. The sample were the patients visiting the general department of four community hospitals in region two. The sample comprised 390 patients in outstanding community hospitals, and 390 patients in general community hospitals. The results revealed that perceived nursing service quality of the patients in outstanding community hospitals and general community hospitals overall and in specific items was at the dissatisfied level. As for each item, the patients were not satisfied with every item. The same result was found when classifying by items in every aspect. In addition, the perceived service quality of the patients in general community hospitals was higher than that of the patients in outstanding community hospitals in all five aspects, i.e. service tangibility, reliability, prompt response to the clients, trust, understanding and knowing the clients.

Suphattra Liamwarangkul (1997) conducted a study of the service quality of the Physical Equipment Division of Sirinthorn National Center for Medical Rehabilitation, as perceived by clients. It was found that the overall service quality as perceived by the clients was at a good level with a 3.57 mean. Regarding each service aspect, i.e. security and safety, service efficiency, politeness, communication, trust, reliability, and response to the clients' need, all were at a good level with means of 3.69, 3.87, 3.71, 3.69, 3.63 and 3.50 respectively. Whereas service access, knowing and understanding the clients, and service tangibility were at a moderate level with means of 3.40, 3.26, and 3.15 respectively.

Phanee Saencharoen (1996) analyzed the result of 44 research projects on the utilization of medical and public health services and found that public health and medical services in Thailand did not provide full coverage, did not provide equal standards of service to all, and provided unsatisfactory services. Evaluation of community hospitals showed lack of quality personnel, and that patients tended to trust in the quality and service of the large hospitals, e.g., regional center hospital,

provincial hospitals, or the university hospital. However they were not satisfied with the personnel's behaviors or personality such as using impolite words. And personnel paid less attention to the clients although clients spent much time commuting to the hospital and waiting for the treatment.

Oberst (1984) carried out a study on method use for evaluating service quality and satisfaction as perceived by cancer patients. He studied background information on the patients' perceptions, and asked their opinion about the facilities that contributed to good service quality. The sample included 20 cancer patients receiving chemical therapy: 12 women and eight men, with ages 23-74 years, and who had received less than six months of chemical therapy. A structured questionnaire was used to collect data. The findings pointed to the need for service facilities to focus on improving waiting time, informing and assisting patients, adequate medical treatment, suitable location for patients to relax, and nurses communication behavior.

White, et al. (2001) studied patient administration: evaluation of patients expectation and patients feeling of service quality of the Dentistry Practice Hospital. He found differences between the expectation and feelings (experience) of patients who received services at the Dentistry Practice Hospital by using the SERVQUAL Model base don Parasuraman's concept. The result showed that the trust of a hospital's reputation and risk guarantee was related to a 59 % alteration of service. Female patients had a higher mean difference of expectation and understanding of service equality than that of male patients. The same result was found among the patients aged between 36-45 years compared with young and the old patients. The patients with technical knowledge had low levels of expectation of service quality, while patients with expert knowledge had a higher level of expectation prior to receiving services than patients with technical knowledge.

Al-Omar Ba (2000) studied the expectation and satisfaction of patients and future behavior of clients related to hospitals in Riyadh with an aim to evaluate patients satisfaction towards hospital services under the Ministry of Public Health, and other government hospitals in Riyadh, Saudi Arabia. He found that kindness of

hospital teams, waiting time, hospital hygiene, personality of doctors and nurses, existing medical technology had a lower statistical significance than expected. The variables significantly predicting reported future behavior related to the government hospitals were medicine used in the hospital, advanced medical technology, and kindness of the hospital team.

The review of related literature suggests that patients satisfaction alters according to demographic characteristics, i.e. sex, age, education, income, and experience of the patients. This study utilizes research results related to evaluation of hospital service quality with respect to expectation and actual services received as a research conceptual framework which includes: 1) service system factors – obvious communication system, adequate number of personnel, medical devices and equipment, and location; and 2) service behavior factors – waiting time, provision of information, equity of service, and treatment ability.

2.5.2 Research related to independent variables

This research focuses on evaluation of the service quality of government hospitals implementing the universal coverage health insurance policy: a case-study of Nonthaburi Province. The research results that promoted the inclusion of research variables in the study are presented as follows:

Sex

Sex is a crucial factor effecting opinion. Males and females often have different opinions. The study of Young, et al. (2000) on patients satisfaction towards hospital care reported that sex significantly effected the satisfaction towards hospital care. Day and Leopapai, (1977: 48) conducted a study on pattern of health care of urban and rural residents and found that familiarity with various procedures of hospitals steps led to higher level of satisfaction of medical services for females than for males. In addition, the study of Piyawan Prakhunthongchai (1990: 95) about patients satisfaction towards government hospital service in Nakhon Sawan province reported

that sex is associated with satisfaction with hospital services, with the level of satisfaction higher among females than males. This finding is consistent with the study result of Wilson (1970: 77) on sex and medical counseling that females were more likely to consult with the doctors about their health than were males since they had more time and it was more convenient for them to seek treatment. In addition, females were more familiar with hospital regulations, hence they had higher level of satisfaction towards medical services than did males. The study of Kulruang Saichumin (253: 157) pointed out that sex was associated with different demand for services from private hospitals. That is, males had a higher demand of service from hospitals than did females. The demand and the extent of demand may differ depending on individual difference. Females who were ill perceived their illness as important and became worried, hence they make faster decision to seek treatment than do males.

In contrast, Suphattra Liamwarangkul (1997: 89) found in her study at the Sirinthorn National Center for Medical rehabilitation that males had a mean level of physical equipment service quality as perceived by the clients similar to that of females. It was explained that the clients of this center were the disabled who have different mental, emotional and physical conditions from the non-disabled. When they came they thought of themselves as disabled, rather than females or males. They came for rehabilitation so they can live normal lives. Therefore, their perceived service quality is not different. This finding is confirmed in the study of Suangthip Wongphan (1998: 88-89) that the expectation and perception of service quality in the out-patient department of the government hospitals in Suphanburi province did not differ by sex. Similarly, the study of Praradchaya Pasook (1996: 111) found that sex had no relation with the satisfaction of patients who received services at the dispensary unit of the out-patient department of Chulalongkorn Hospital.

The above studies suggest that females have a higher level of satisfaction towards hospital service than do males. However, several studies showed that sex had no relation with satisfaction on hospital service. Hence, the researcher is interested in examining the effect of sex on evaluation of out-patient service quality.

Age

Age reflects experience of life, thoughts, behavior, emotion and mind, and thus people of different ages may have different opinions. The study of Suphattra Liamwarangkul (1997: 89) found that the older clients had a higher level of perceived service quality compared to younger clients. Older clients had more experience with life and when they came to receive service at one location, they compared the services with what they received from other locations. The result agreed with the study of Praradchaya Pasook (1996: IV) on factors effecting the satisfaction of patients receiving services from the dispensary unit of the out-patient department at Chulalongkorn Hospital. She found that age was associated with satisfaction of patients receiving services at the dispensary unit, i.e. older patients had higher levels of satisfaction than did younger patients. However, Piyawan Prakhunkhongchai (1990: 73-74) found that younger patients had higher levels of satisfaction towards services than did older patients. This is because younger ones had more understanding about the service system of the hospital, were more literate, were more active and moved faster.

In contrast, the study of Benya Luankhaisong (1998: 59) on satisfaction towards the service received from community hospitals in Buriram Province reported that age of the out-patients and in-patients had no association with satisfaction towards hospital services. This finding agreed with the study of Dussadee Yairuangsi (1998: 80) that age had no relation with the satisfaction of the sick monks receiving medical treatment in the in-patient wards of the monk hospital. Similarly, the study of Benjamas Sirikamolsathien (1999: 77) found that age had no relation with the satisfaction on the service of Somdej Phrayuppharaj Dejudom Hospital. This is because all of the service providers had been trained about service behavior, so they realized the importance of providing equal service to every client at every level.

The above studies suggested various forms of the relationship between age and satisfaction of the clients towards hospital services. That is, age could have

either a positive or negative relationship or no relationship with hospital services. Hence, the researcher is interested in examining whether and how age is associated with the evaluation of hospital quality.

Education

Education is a factor effecting the demand of medical services and service expectations. Educated people understand the benefits of health care, and thus are more likely to utilize medical services as well as have high expectations of hospital services. As a result, they may evaluate the quality of services received lower than those with less education. The study of Anong Uawatthana (1999: 89) reported that clients with different educational levels had different levels of satisfaction with the services. Those having primary education had a higher level of satisfaction than those with a diploma degree or higher. The study of Piyanuch Phromsakha Na Bakonnakorn (1997: 62) found that highly educated patients had low level of satisfaction towards nursing service, whereas those with less education had high level of satisfaction with hospital services. The study of Sutarga (1998: 11) showed that education had an association with patients satisfaction towards the service of Sena Hospital in Ayutthaya Province.

Education is a social factor contributing to the efficiency and ability of people to make self adjustments. It assists people in their physical and intellectual development. Highly educated people usually have more rational thinking. However, the study Dusadee Yairuangsi (1998: 83) found that the educational level had no relation with patients' satisfaction towards medical services. In addition, the study of Benjamas Sirikamolsthient (1999: 83) also found that level of education did not affect level of satisfaction towards services. Moreover, the study of Benya Luakthaisong (1998: 61) reported no relationship between education level of in-patients and out-patients with their satisfaction towards the services provided by community hospitals.

In conclusion, research on education of patients variously reported either education had a relationship or no relationship with the quality of services

according to patients opinions. Therefore the relationship between education and perception of quality of service is not certain and hence requires more research.

Income

Income reflects economic and social status. It is an important factor that determines social opportunity, for instance, the demand to seek health service which differs among each income group. The study of Santhad Sermsi and Railey (1974: 58) found that economic status was a significant factor affecting the selection of health services from various sources. Patients with low income would have a higher level of satisfaction towards hospital services than those with higher income. This was because those with higher income would expect good services for the money they paid. While those with lower income choose to receive services from government hospitals without service expectation but just because of lower cost. Piyawan Prakhunkhongchai (1990: 75) studied satisfaction of out-patients who received government hospital services in Nakorn Sawan province. She found that the patients with lower income had a higher level of satisfaction of services than those with higher income. The result is consistent with the study of Oraphin Bunnark and Atchra Enz (1996: abstract) on satisfaction and need with health centers and community hospitals under control of the Bangkok Metropolitan Administration, and the study of Ratchaya Kulwanitchainan (1992: Khor) on satisfaction of insurance clients in Bangkok and peripheral areas towards medical services.

According to the study of Suangthip Wongphan (1998: 95) on service quality expected and perceived by out-patient clients of Suphanburi Provincial Hospital, the expectation and perception of service quality were not different among clients with different income. This result is consistent with the study of Dusadee Yairuangsi (1998: 82) that income had no relation with client satisfaction.

It can be concluded that the patients with low income or low economic status would expect and accept their satisfaction of services would be more easily fulfilled than those with high income. Hence, patients with low income evaluated

hospital service quality at a high level. A number of research studies suggest that income had no relation with the evaluation of service quality. Therefore, the researcher is interested to employ income as a variable to examine its association with evaluation of service quality.

Experience in utilizing hospital service

Patients who had used hospital services are likely to compare the service received to medical services under the universal coverage health insurance project. They would mention what they have seen in the hospital or compare the past to the present services. Thus patient experience is important for evaluating hospital service quality. The research conducted by Ratchaya Kulwanitchainan (1992: 69) reported that insurance clients who had ever used medical services from other service facilities before using the service under the social security project had a higher level of satisfaction on the disposition of personnel, fast and timely service, adequate treatment, expense, and service quality than those who had never used services from other places. This finding is consistent with the study of Tagliaczzo (1965: 219-228) that patients usually consider their previous experience of using hospital services as the standard for evaluating the currently received hospital services. They expected to receive the services from kind and friendly nurses who provide fast service and pay attention to the patients.

However, the study of Praradchay Pasook (1996: 1-11) found that the past experience of services received from other hospitals had no relationship with the satisfaction of patients who received service from dispensary unit of the out-patient department at Chulalongkorn Hospital.

It can be thus concluded that experience of using hospital services of the patients had either a relationship or no relation with the evaluation of hospital service quality. Therefore, the researcher is interested to examine how experience with services affects patients evaluation of service quality.

Service system factors

Clear communication system

Communication is crucial in the service system. A clear communication system of service steps and direction signs builds a positive impression and attitudes in the clients towards the service. The study of Anong Uawattana (1999: 88) found that the clients had a low level of satisfaction of communication of out-patient departments in terms of the rapidity in transferring the clients from one point to another. This finding is consistent with the study of Oraphin Chaiphayon (1999: 54) on satisfaction of out-patient clients at Siriraj Hospital. She found that the patients had the lowest level of satisfaction on coordination between service units and coordination between personnel. According to the clients' opinion, they received different information from the service providers with unclear explanations. On the contrary, Thanathorn Thamrak (1999: 55) in his study of insurance clients of Phranangklaio Hospital found that the highest level of satisfaction was for service coordination.

Little research has been conducted about the communication system and evaluation of service quality. Hence, information about this variable is limited. However, the researcher is interested to examine how the factor of a clear communication system would effect the evaluation of hospital quality under the universal coverage health insurance project of Nonthaburi Province. The result would be used as a guideline for further evaluating service quality of other hospitals under the Ministry of Public Health where universal coverage health insurance project is implemented.

Sufficiency of personnel

Other than convenient, fast and quality services, sufficient personnel is an important factor that brings satisfaction to clients. The study on current situation and people's expectation towards nursing service under the health cards project in Roi-Et province conducted by Kanchana Butchon (1993: 108) reported that the people in Roi-Et province gave the highest mean score of most desirable expectation on service providers under the health cards project at the health center level. The largest difference in mean scores between current situation and expectation was found for the item "have sufficient doctors to give the medical treatment". This is consistent with the study of Anong Uawattana (1999: 101) who found that the out-patient clients of Amartcharoen Hospital who expressed their opinions and recommendations for improvement of service quality said that there were insufficient doctors and the number of specialist doctors should be increased. Whereas the study of Oraphin Chaiphayom (1999: 44) stated that the out-patient clients of Siriraj Hospital were satisfied with the number of doctors.

The review of related literature and research suggests that patients either had satisfaction towards sufficiency of personnel or expected more personnel. Hence, sufficiency of personnel is a variable in this study on evaluation of hospital service quality.

Medical equipment and devices

Sufficient medical equipment and devices used in hospital services is necessary. They should be advanced, clean, have quality and be available in sufficient numbers, and in the condition ready for use at all times to facilitate sufficient, convenient, and fast services. Virote Tangcharoensathien, et.al (1996: 158-168) researched hospital service quality according to patient opinions. The results revealed that one reason for choosing to use hospital service is advance medical equipment. Sakaowadee Duangden (1996: 158) in her study of expected nursing service quality of patients and perceived patient expectation of nursing ward heads in

government hospitals in Bangkok found that the most expected quality service of the patients was the use of advanced medical device in treatment. The study on patient satisfaction towards the services of Somdej Phrayappharaj Dejudom Hospital, Udom Ratchathani Province conducted by Benjamas Sirikamolsathien (1999: 81) showed that sufficiency of the medical equipment had a relationship with patient satisfaction towards hospital services. This finding agreed with the findings of the study of Anong Uawattana (1999: 89) that the out-patient clients of Amnartcharoen Hospital had the lowest level of satisfaction on overall service quality including the item on preparedness and advance of medical equipment and devices.

According to reviewed research, the medical equipment factor has a relationship with evaluation of service quality. Moreover, patients had expectations on equipment and instruments used for hospital services. Hence, the researcher is interested to employ the medical equipment and instruments variable as a factor to examine its relation with evaluation of service quality.

Location

Arrangement of service location is related to expected service quality and should include clean, orderly, modern, and appealing areas with enough light and air ventilation. Sakaodee Duang (1996: 158) studied expected nursing service quality of the patients and perceived patients' expectation of nurse ward heads of government hospitals in Bangkok. The findings suggested that expected service quality was related to service areas of the hospital with enough light and which were well ordered. This finding conforms to the study of Virote Tangcharoensathien, et. al (1995: 158-168) on hospital service quality according to patient opinions. They found that one reason for choosing to use hospital services is convenience and atmosphere. Gesanee Praphutphittaya (1997) carried out a study on client satisfaction towards nursing services of the in-patient department at Lanna Hospital. She found that the clients had a high level of satisfaction towards the hospital environment. Moreover, the study of Preeya Khramakham (1995: 109) pointed out that one factor associated with out-patient satisfaction of Phrapokkiao Hospital in Chanthaburi province was

small service locations and poor environment. Phensi Chaisabad, et.al (1997) in her study on service attending time and satisfaction of the out-patients at Krathoo Hospital in Phuket province found that patients were unsatisfied with insufficient waiting seats.

The research cited above suggest that hospital location has an association with patient evaluation off service quality. It is a reason why clients choose to use certain hospital services. Therefore, the researcher will employ hospital location as a variable to predict evaluation of service quality.

Waiting time

Hospitals should be well-prepared for providing services. Contact with hospitals should be convenient, fast, with little waiting time. Mili-Boussen, et al. (2000) studied patient satisfaction towards health care quality for out-patients receiving eye cataract operation. He found that two in three out-patients who received eye cataract operations had negative opinions towards the long waiting time for the operation. This finding is consistent with Benjamas Sirikamolsathien (1999: 82) who studied in-patients' satisfaction towards the services of Somdej Phrayuppharaj Dejudom Hospital, Dejudom district, Ubon Ratchathani province. She found that waiting time had a relationship with in-patient satisfaction towards hospital services. The study of Urai Chamnankha, et.al (1996: 292) also found that waiting time had a relationship with satisfaction of medical services by clients.

The study of Preeya Khramakram (1995: 109) reported that a factor negatively associated with satisfaction of out-patients at Phrapokklao Hospital, Chantaburi province was delays in services. The study on the out-patient clients of Amnartcharoen Hospital conducted by Anong Uawatthana (1993: 93) showed that service waiting time in this hospital (for examination, for issuing patient card, and for dispensary of medicines) resulted in decreased client satisfaction. This is consistent with the research of Siraya Sammawat (1997: 286-297) in her study of the satisfaction of nursing services of the patients admitted to the ordinary surgery ward at Ramathibodi Hospital. She found that these in-patients were unsatisfied with delayed

services. Bang-On Pitsawong et.al (cited in Sakaodee Duangden, 1996: 55-56) studied client opinions towards government and private hospital services in Surin Province and found that clients had recommended that the government hospitals should improve in order to provide faster service.

According to reviewed research the service waiting time has a relationship with patient evaluation of hospital service quality. Therefore, the researcher will employ service waiting time to examine its relationship with evaluation of service quality.

Service behavior factors

Providing information

Providing information and details of the disease as well as providing self practice with easy language before the patients left the hospital was related to high levels of satisfaction to the patients towards hospital services. The study of patients' satisfaction towards the service of Somdej Phrayuppharaj Dejudom Hospital, Dejudom District, Ubon Rathchathani province conducted by Benjamas Sirikamolsathien (1999: 80) showed that providing information had a significant relationship with patient satisfaction towards hospital services. The result conforms to the study of Suchittra Nillert (1196: Khor) that information received had a relationship with satisfaction with medical services. The study of Anong Uawatthana (1999: 89) found that out-patient clients of Amnartcharoen Hospital suggestions for improvement of hospital service quality included improving advice provided to clients, especially advice from nurses who were closer to patients than other personnel. Thanyathorn Thamarak (1999: 55) studied the satisfaction of insurance clients towards out-patient services at Phranangklao Hospital. He found that insurance clients had the lowest levels of satisfaction on the drug description of personnel at the dispensary unit. This result agrees with the study of Wirote Tangcharoensathien, et.al (1996: 165) who found that providing information and advice is very important for medical service, so that the patients who have knowledge and understanding about the disease and thus

cooperate in treatment benefit from treatment and are more able to care for themselves in the long term.

However, the study of Anake Supheeranan (1994: 293-298) found that receiving information had no relationship with patient satisfaction. Phanida Khamyu (1995: 100) studied expected service quality of the patients and perceived patient expectations of patient ward heads in private hospitals in Bangkok. She found that the patient expected service quality was related to low levels of mean scores on providing information on the treatment cost and rules to the patients once admitted in the hospital, advice on rules and mode of payment, and explanation about the treatment.

The review literature suggest that providing information to patients had either a relationship or no relationship with evaluation of the hospital service quality according to patient opinion. Hence, it can not be determined how providing information by service providers affect the evaluation of hospital service quality. Therefore, the researcher is interested to employ providing information by service providers as a variable in this study.

Disposition of service providers

The philosophy of service is client satisfaction. Every service provider should have a positive disposition, good human relationships with the clients and their relatives, should be humble, and give honor to all clients, including approaching and greeting the clients. Service providers should also welcome the clients and their relatives with pleasure, be eager, willing, and ready to provide services. They should speak politely in a timely manner, while providing friendly services (Somchai Ruangsirinorn: 1995). Orachorn Archarit (1998: 109) studied the components of service quality of the regional center hospital and general hospital in the southern region as expected by in-patients. She found that the factor most expected by in-patients was positive disposition since the patients need to have interrelations and communication with service providers at all times. Having a

positive disposition with each other creates a good feeling between service providers and clients. This finding is consistent with the study of Jalvalgi., et.al (1991, cited in Aranya Manit, 1997) in the survey of choosing hospital services, that found that an important factor effecting hospital selection and perceived quality of hospitals was well-behaved personnel who spoke politely and gently. Somsong Phengsuwan, et.al (1998) studied the opinions of clients and nurses towards services in Siriraj Hospital, and suggested that the nurses should smile and greet the patients. The study of Kanchana Butchon (1993: 109) found that the people in Roi-Et province had a large mean score difference of present condition and expectations about service personnel in general hospital for the item **“When using the health card, the personnel give service with polite words.”**

In contrast, Rungnapha Yang-en (1999: 125) compared hospital service quality as perceived by the in-patients in the hospitals implementing and not implementing total quality management. She found perceived hospital service quality of the in-patients was significantly different ($p < 0.05$) among hospitals using TQM for one year, three years, and six years, particularly in the area of personnel's disposition.

It is concluded from related research that service providers' disposition either had or had no relation with service quality according to the patients' opinion. Hence, it could not be thus concluded that how disposition would have different effect on evaluation of hospital service quality. Therefore, the researcher is interested to employ disposition of service providers as a variable in this research.

Equality

Hospital services focus on health care service that are directly related to people. Thus, every service requires morality, ethics, and equality regardless of social status and class. Orachorn Archarit (1998) studied this component of service quality as expected by in-patients of the regional center hospital and general hospital in the southern region. She found that a very important variable explaining was the ethics of service providers in providing equal services without discrimination. This is

consistent with the study of Attachai Phoomaphan et.al (1995: 68-70) in the survey of information on out-patient service management of every community hospital in Sisaked province in 1994. It was found that one expected or desired hospital service of patients was provision of equal service.

Little research on service equality has been conducted, hence there is limited information on the form of the relationship with service quality. However, the researcher is interested examine the relation between service equality and evaluation of hospital service. Since every patient has equal rights to receive equal service without discrimination or with different service standard as stated in the objectives of the universal coverage health insurance, therefore, the researcher is interested to examine how service equality is associated with the evaluation of hospital service quality.

Ability to provide treatment

The ability of personnel is important for service quality, particularly the ability to provide medical and health services. Although service providers have different knowledge and ability according to educational background and duration of work, they all should have want to work well together, leading to the same goal. Benjamas Sirikamols Sathien (1999:78) studied in-patients' satisfaction towards the services of Somdej Phrayuppharaj Dejudom Hospital, Dejudom District, Ubon Ratchathani Province. She found that the ability of service providers had a significant relationship ($p < 0.001$) with in-patients' satisfaction towards services. This finding is consistent with the study of Anong Uawatthana (1999: 89), who found that patients receiving out-patient services at Anartcharoen Hospital gave the highest level of satisfaction to the treatment ability of the doctors. The study of Phanida Khamyu (1995: 99-100) reported that one service quality highly expected from nurses is the ability to perform nursing practices as stated in the treatment plan, the ability to help solve problems and save the patient from abnormal symptoms. The study of Wirote Tangcharoensathien, et.al (1996: 164) reported that a reason to choose a certain hospital is availability of specialist doctors.

Previous research suggests that treatment ability had a relationship with the evaluation of hospital service quality and that patients have a high expectation of treatment ability. Therefore, the perception of treatment ability is used to predict evaluation of service quality in this study.

2.5.3 Synthesis of research for development of conceptual framework

According to the review of related concepts and theories, it can be concluded that evaluation of service quality is concerned with the ability to accurately respond to various needs and thus create satisfaction among patients. The patients expectations and demands are regarded as the norm for service implementation. Moreover, evaluation of service quality is necessary and useful to government hospitals implementing the universal coverage health insurance project to know what the hospitals have achieved in response to patients needs. Since patient's opinions reflects service quality, if the hospitals have the ability to respond to patients needs they are considered as having quality services. Service quality depends on the comparison between expected services and the actual services received according to the patients opinion. Therefore, individual factors, i.e. sex, age, education, income, experience in using hospital services, expectation of service quality, and actual services received are independent variables which might effect the out-patients' evaluation of service quality, according to the concepts and theory of Oberst (1984: 2366-2367).

The researcher had applied two groups of factors derived from the literature: 1) service system factors, including clear communication system, sufficiency of personnel, medical equipment and devices, location of services, waiting time; and 2) service behavior factors, including provision of information, disposition of staff, service equality, and treatment ability. The researcher has documented the objectives of the universal coverage health insurance project concerning system efficiency and service equality to determine the conceptual framework of this research.

CHAPTER III

RESEARCH METHODOLOGY

This survey research aims to examine the quality of out-patient services through clients' opinions, in the hospitals implementing the universal coverage health insurance project in Nonthaburi province. A structured questionnaire was used for data collection.

3.1 Research methods

This survey research employed two steps:

3.1.1 Searching for information from documentary surveys such as textbooks, articles, journals, theses, and related research reports.

3.1.2 Conducting a field survey by using questionnaires as a research tool. The study population is out-patients with gold health insurance cards and receiving hospital treatment in Nonthaburi province.

3.2 Study population

The study population comprises 351,488 clients who have gold health insurance cards and received treatment from seven hospitals in Nonthaburi province.

3.3 Sampling design

The sample size was calculated from the total number of 351,448 people holding gold health insurance cards (data as of 31 May 2001) (Nonthaburi Provincial Health Office, 2001), using Taro Yamane's formula, allowing an error at 0.05 level, obtaining a sample of 400 as shown below:

$$n = \frac{N}{1 - Ne^2}$$

n = sample population
 N = number of population here based on the total Number of 351,488 population having gold health cards as of 31 May 2001 (Nonthaburi Provincial Health Office)

e = 5 % accepted error therefore,

$$\begin{aligned} \text{sample population with gold health cards} &= \frac{351,488}{1 + (351,488 (0.05)^2)} \\ &= 399.55 \quad \text{people} \end{aligned}$$

Hence, the sample size is 400 people with gold health insurance cards.

To select the sample group, probability theory was used for systematic sampling. The sampling was undertaken among those holding the gold health cards in seven hospitals to obtain proportionate sample shown in Table 3.

Table 3: Population and the sample size

| No. | Hospitals | Number of population with gold health cards | Sample size |
|--------------|-------------------------|---|-------------|
| 1. | Phra Nang Klao Hospital | 133,047 | 152 |
| 2. | Cholpratharn Hospital | 82,650 | 94 |
| 3. | Banggruay Hospital | 25,460 | 29 |
| 4. | Sainoi Hospital | 21,417 | 24 |
| 5. | Pakkred Hospital | 32,736 | 37 |
| 6. | Bangbuathong Hospital | 32,715 | 37 |
| 7. | Bangyai Hospital | 23,463 | 27 |
| Total | | 351,488 | 400 |

After obtaining the proportionate sample, the researcher then marked number one to number ten and drew the lots. Number 5 was picked up, so the first sample was the out-patients with gold card who received the service under the universal health insurance project in each day. The samples were drawn from every fifth out-patient who received service at the dispensary which is the last point of hospital service.

3.4 Research tool

This research employed a structured questionnaire as a research tool. This was designed according to the research objectives, with the following steps:

3.4.1 Searching and compiling information from related documents, textbooks, and research reports.

3.4.2 Making summary of information and concepts as guidelines for identifying scope and contents of the questionnaire covering the study area. The questionnaire consisted of three parts.

Part 1 General information on background characteristics of the respondents, i.e. sex, age, education, income, experience in using hospital service. This part contains open-ended and close-ended questions.

Part 2 Information on expectation of the clients towards the service quality and the actual service received. The respondents evaluate their own expectation whether they need such services or received such services. The dimension of evaluation covers the service system and service behavior, i.e. the distinction of communication, adequate number of personnel, medical equipment, place, waiting time for service, provision of information, personality, equality, and professional ability.

This part contains the questions with checklists, and the scores were given and classified into four levels:

| Expectations of service quality | Actual services received |
|--|---------------------------------|
| - high level of expectation = 3 | - much received = 3 |
| - moderate level of expectation = 2 | - moderate received = 2 |
| - low level of expectation = 1 | - less received = 1 |
| - no expectation = 0 | - not received = 0 |

In addition, information on evaluation of service quality in the out-patients covers the dimensions of service system, service satisfaction, intention to revisit, and recommendation to others.

Likert Scale was used for evaluation of service quality, classified into five levels.

| | | |
|---------------------|---|---|
| - strongly agree | = | 5 |
| - agree | = | 4 |
| - moderately agree | = | 3 |
| - disagree | = | 2 |
| - strongly disagree | = | 1 |

Part 3 Information on the client's opinion of utilizing the 30-baht coverage treatment service. This part was left open for the clients to express their opinions on the problems of the out-patient service and for suggestions. The questions are close-ended and open-ended types.

3.4.3 The constructed questionnaire was proposed to advisors for improvement of content validity and wordings to be more concise, clear, and easy to understand.

3.4.4 The improved questionnaire was then pre-tested with 30 out-patients who are not part of the sampled group.

3.4.5 All information in the returned questionnaires was then tested for reliability using Cronbach's Coefficient Alpha, obtaining the following values:

- 0.8826 for the question items on out-patients' expectation on service quality
- 0.8305 for the question items on actual services received
- 0.9239 for question items on out-patient service quality

The overall reliability of the questionnaire is 0.8723

3.5 Data collection procedures

Data collection was undertaken as follows:

3.5.1 The researcher requested information on the total number of population having gold health cards from the government hospitals in Nonthaburi province.

3.5.2 Preparing official letters from the Faculty of Social Science and Humanities, Mahidol University addressed to those seven hospitals to inform them about the research objectives and to request their cooperation.

3.5.3 The researcher use structured questionnaires to collect the data from the sample at the dispensary area which is the last point of hospital service. Data collection was undertaken for one month (1 – 31 October 2002) during the workdays between 9.00 – 12.00 hrs. The total sample is 400. The researcher clearly informed the respondents that the information they gave will be kept confidential, and thus the researcher expected to obtain relatively actual information.

3.6 Data analysis

After completion of the interviews, the questionnaires were tested for completeness. The data in the completed questionnaires was coded and recorded in the computer, then statistically analyzed using statistical package as follow:

3.6.1 Descriptive statistics

Mode and percentage were employed to obtain background characteristics of the sample.

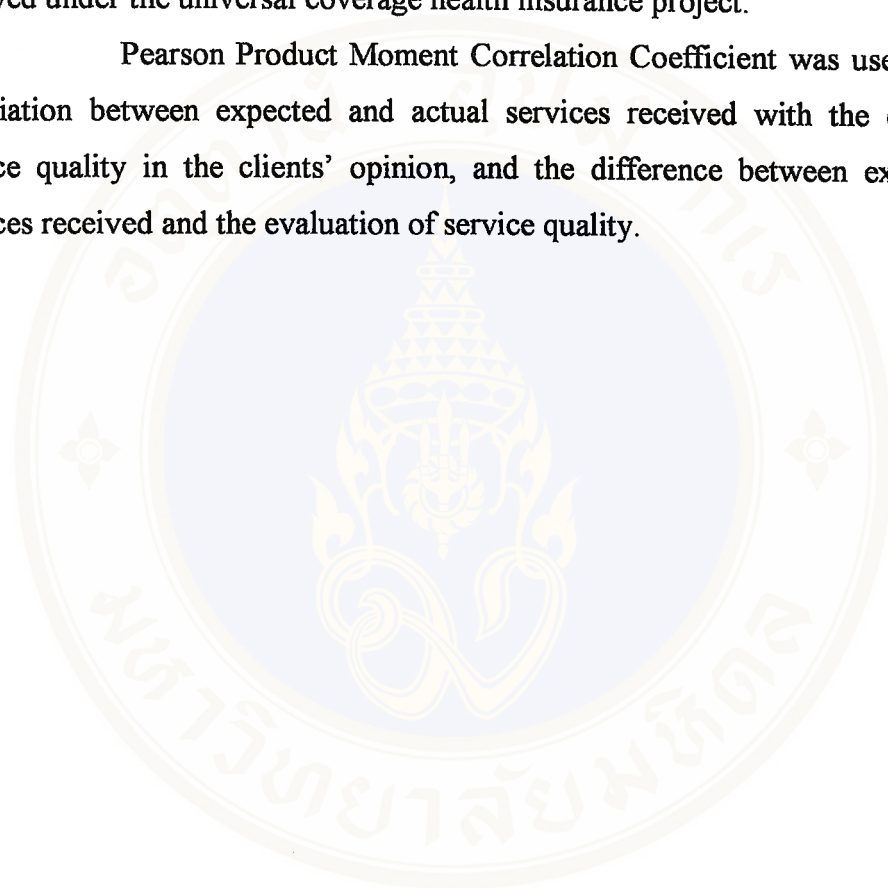
Mean, standard deviation, maximum and minimum values, were used to present the data on expected service quality, level of service received.

3.6.2 Analytical statistics

T-test and ANOVA were employed to examine factors on individual characteristics of the samples that effect evaluation of service quality.

T-test was used to compare expected and actual hospital services received under the universal coverage health insurance project.

Pearson Product Moment Correlation Coefficient was used to find the association between expected and actual services received with the evaluation of service quality in the clients' opinion, and the difference between expected/actual services received and the evaluation of service quality.



CHAPTER IV RESULTS

The results of the study on evaluation of government hospital service quality under the universal coverage health insurance policy: a case study of Nonthaburi province, is presented in three parts:

Part 1 Information on individual characteristics of the sample, information on expected services and actual services received, and evaluation of service quality, classified as follows :

- 1.1 Individual characteristics of the sample, i.e. sex, age, education, income, and experience in using hospital services.
- 1.2 Values of service system and service behavior factors.
- 1.3 Relationships between expected services, actual services received, and evaluation of service quality.
- 1.4 Expected services, actual services received, and evaluation of service quality, classified by level.

Part 2 Relationship between various factors and evaluation of service quality, classified as follows :

- 2.1 Comparison of individual characteristics that effect evaluation of service quality.
- 2.2 Comparison between expected services/actual services received and evaluation of service quality.
- 2.3 Relationship between expected services/actual services received and evaluation of service quality.
- 2.4 Relationship between the differences between expected service and actual service received and evaluation of service quality.

Part 3 Conclusion

Part 1: Information on individual characteristics of the sample, information on expected services and actual services received, and evaluation of service quality, classified as follows:

1.1 Individual characteristics

Table 4: Percentage distribution on individual characteristic of the sample

| Individual characteristics | Number (persons) | Percentage |
|---|------------------|--------------|
| Sex | | |
| Male | 112 | 28.0 |
| Female | 288 | 72.0 |
| Total | 400 | 100.0 |
| Age | | |
| < 20 yrs | 50 | 12.5 |
| 20-29 yrs | 78 | 19.5 |
| 30-39 yrs | 93 | 23.3 |
| 40-49 yrs | 78 | 19.5 |
| 50-59 yrs | 62 | 15.4 |
| > 60 yrs | 39 | 9.8 |
| Total | 400 | 100.0 |
| <i>mean = 38.03 yrs maximum = 82 yrs minimum = 15 yrs</i> | | |
| Education | | |
| Primary level or lower | 161 | 40.3 |
| Secondary level | 178 | 44.5 |
| Bachelor degree | 57 | 14.2 |
| Higher than Bachelor degree | 4 | 1.0 |
| Total | 400 | 100.0 |
| Income | | |
| < 3,000 Baht/month | 189 | 47.3 |
| 3,001-6,000 Baht/month | 99 | 24.6 |
| 6,001-9,000 Baht/month | 50 | 12.5 |
| 9,001-12,000 Baht/month | 22 | 5.5 |
| 12,000-15,000 Baht/month | 19 | 4.8 |
| > 15,001 Baht/month | 21 | 5.3 |
| Total | 400 | 100.0 |
| Experience using hospital service | | |
| Never | 128 | 32.0 |
| Ever | 272 | 68.0 |
| Total | 400 | 100.0 |

Individual characteristics of the sample are classified by sex, age, education, income, and experience in using hospital services. As shown in Table 4, the total 400 sample comprises 72.0 percent female and 28.0 percent male.

The majority of the sample is aged between 30 - 39 years (23.3 percent), followed by 20 - 29 years (19.5 percent), and 40 - 49 years (19.5 percent), and 60 year and over (9.8 percent). Mean age is 38 (average age = 38.03), the oldest respondent is 82 years and the youngest is 15 years of age.

The majority (44.5 percent) of the sample had completed a secondary level of education, followed by a primary level or lower (40.3 percent), and only 1.0 percent had completed higher than a bachelors degree.

Regarding income, about half (47.3 percent) earned less than 3,000 Baht per month, followed by 3,001 - 6,000 Baht (24.8 percent), and 12,000 - 15,000 Baht (4.8 percent).

With respect to their experience in using hospital service as identified in the health card before introducing the 30 Baht coverage treatment project, the data suggested that more than half (68.0 percent) had experienced using hospital service with the gold card, and 32.0 percent had never used hospital services.

1.2 Values of service system and service behavior factors

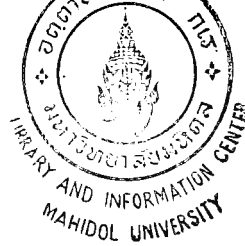
Table 5: Mean and standard deviations of service system factors and service behavior factors

| Variables | Expectation | | Actual service received | | Evaluation of service quality | |
|---------------------------------------|-------------|--------------------|-------------------------|--------------------|-------------------------------|--------------------|
| | Mean | Standard deviation | Mean | Standard deviation | Mean | Standard deviation |
| 1. service system factors | 2.35 | 0.52 | 2.15 | 0.48 | 3.56 | 0.76 |
| - clear communication system | 2.34 | 0.62 | 2.19 | 0.60 | 3.60 | 0.86 |
| - adequate number personnel | 2.32 | 0.67 | 2.10 | 0.65 | 3.48 | 0.93 |
| - medical equipment | 2.42 | 0.64 | 2.25 | 0.63 | 3.69 | 0.93 |
| - location | 2.38 | 0.67 | 2.10 | 0.68 | 3.51 | 0.97 |
| - waiting time | 2.32 | 0.67 | 2.13 | 0.64 | 3.50 | 0.92 |
| 2. factors on service behavior | 2.43 | 0.55 | 2.27 | 0.52 | 3.71 | 0.80 |
| - provision of information | 2.41 | 0.64 | 2.24 | 0.65 | 3.66 | 0.90 |
| - positioning | 2.46 | 0.65 | 2.29 | 0.65 | 3.75 | 0.97 |
| - equality | 2.48 | 0.63 | 2.35 | 0.61 | 3.79 | 0.93 |
| - ability to provide treatment | 2.38 | 0.68 | 2.19 | 0.65 | 3.64 | 0.94 |

Expected services, actual services received, and evaluation of service quality, various factors on the service system and service behavior had been analyzed as shown below.

1.2.1 Factors related to the service system

Service system variable include clear communication systems, adequate number of personnel, medical equipment and devices, location of services, and waiting time. Table 5 shows that the mean value of overall expectation towards the service system is 2.35 (full score = 3), while the mean score of actual services received is 2.15 (full score = 3). The mean score of evaluation of the service system is 3.56 (full score



= 5). The results suggest that the mean score of service system factors, i.e. expected services, actual services received, and evaluation of service quality is at a moderate level.

- Clear communication system

The results show that the mean value of expectation of a clear communication system is 2.34 (full score = 3). Whereas the mean score of actual service received is 2.19 (full score = 3), and mean score of evaluation of service quality in clear communication is 3.60 (full score = 5).

- Adequate number of personnel

The mean value of expectation for adequate number of personnel is 2.32 (full score = 3), comparing to 2.10 (full score = 3) for actual services received, and 3.48 (full score = 5) for evaluation of service quality.

- Medical equipment and devices

It was found that the expectation towards medical equipment and devices had a mean score of 2.42 (full score = 3), while the mean score for actual services received and evaluation of service quality in this factor are 2.25 (full score = 3) and 3.69 (full score = 5) respectively.

- Location of services

The mean value of 2.38 (full score = 3) for expectation of service location in the hospital can be compared to a mean score of 2.13 (full score = 3) for actual services received, and 3.51 (full score = 5) for evaluation of service quality regarding the location of hospital services.

- **Waiting time**

For waiting time, the mean score of expectation in waiting time is 2.32 (full score = 3), while the mean value of actual services and evaluation of service quality on waiting time are 2.13 (full score = 3), and 3.50 (full score = 5) respectively.

Expectation of service quality

The sample had the highest level of expectation on medical equipment and devices, with a mean value of 2.42 (full score = 3), followed by expectation on service location of the hospital, with a mean score of 2.38 (full score = 3), whereas the lowest level of expectation is for adequate number of personnel, with a mean score of 2.32 (full score = 3).

Hospital services received

The respondents indicated that the most highly rated service received service was related to medical equipment and devices with a mean value of 2.25 (full score = 3), followed by clear communication system with a mean score 2.19 (full score = 3), and the least rated service received was adequate number of personnel and service location of the hospital with equal mean values of 2.10 (full score = 3).

Evaluation of service quality

Respondents gave the highest mean score (3.69 from 5) for service quality on medical equipment and devices, followed by clear communication system (3.60 from 5), and the lowest mean value (3.48 from 5) for adequate number of personnel.

It can be seen that the respondents gave the highest mean score for medical equipment and devices in all aspects, i.e. expected service quality, actual

services received, and evaluation of service quality. Whereas the lowest mean score is given to adequate number of personnel in all three aspects.

1.2.2 Service behavior factors

Service behavior includes providing information, disposition, equality, and ability to provide treatment. Overall, respondents had a mean value of expectation on service behavior factors of 2.43 (full score = 3), while the mean score of actual services received and evaluation of service quality were 2.27 (full score = 3) and 3.71 (full score = 5) respectively. The results show that the mean values of service behavior factors regarding expected service, actual services received, and evaluation of service quality are at moderate levels.

- Providing information

Regarding providing information concerning the treatment, it was found that the mean value of expected services on providing information is 2.41 (full score = 3). In comparison, the mean value for actual services received, and evaluation of service quality are 2.24 (full score = 3), and 3.67 (full score = 5) respectively.

- Disposition

Respondents had expectations towards the disposition of service providers with a mean value of 2.64 (full score = 3), while the mean value for actual services received and evaluation of service quality in this aspect are 2.29 (full score = 3) and 3.75 (full score = 5).

- Equality

There was a mean value of 2.48 (full score = 3) for their expectation of service equality, 2.35 (full score = 3) for actual services received, and 3.79 (full score = 5) for evaluation of service quality regarding providers disposition.

- Ability to provide treatment

The mean value of expectation in the ability to provide treatment is 2.38 (full score = 3), while the mean score of actual service and evaluation of service quality are 2.19 (full score = 3), and 3.64 (full score = 5) respectively.

Expectation on service quality

The results revealed that the respondents had the highest level of expectation on service equality with a mean value of 2.42 (full score = 3), followed by expectation on disposition of service providers, with a mean value of 2.46 (full score = 3), whereas the lowest level of expectation is for ability to provide treatment, with a mean value 2.38 (full score = 3).

Actual services received

Respondents that their most highly rated service is on service equality with a mean value of 2.35 (full score = 3), followed by disposition of service providers with a mean score of 2.29 (full score = 3), and the least rate service received is the ability to provide treatment with a mean score of 2.19 (full score = 3).

Evaluation of service quality

Respondents gave the highest mean score (3.79 from 5) for service equality, followed by disposition of service providers (3.75 from 5), and lowest mean score (3.64 from 5) for ability to provide treatment..

The results show that respondents gave the highest mean score for service equality in all aspects, i.e. expected service quality, actual services received, and evaluation of service quality. Whereas the lowest mean score is given to ability to provide treatment in all three aspects.

1.3 Relationships between expected services, actual services received and evaluation of service quality

Table 6: Scores between expected services, actual services received and evaluation of service quality

| Variables | Maximum (score) | Minimum (score) | Mean (score) | Standard deviation (score) | Number (person) |
|-------------------------------|-----------------|-----------------|--------------|----------------------------|-----------------|
| Expected services | 54 | 5 | 42.99 | 8.95 | 400 |
| Actual services received | 54 | 7 | 39.68 | 8.24 | 400 |
| Evaluation of service quality | 120 | 41 | 89.04 | 17.26 | 400 |

In this study, there were a total of 18 questions about service systems factors: clear communication system, adequate number of personnel, medical equipment and device, service location, and waiting time; and service behavior factors: provision of information, disposition of service providers, service equality, and ability to provide services. The respondents were asked to assess here questions in terms of their expectations towards these services (high, moderate, low, or no expectation). For actual services received, they were asked to assess if these services are much received, moderately received, less received, or not received at all. The measurement was 3 - 0 respectively. Hence, the maximum score is 54, and the minimum is 0.

Evaluation of government hospital services under the universal coverage health insurance policy was undertaken by the out-patients, with five levels of measurement with scores 1 - 5, hence obtaining a minimum value of 18 and a maximum value of 120.

Table 6 shows that the mean score for expected service is 42.99, with a maximum score of 54 and a minimum score of 5. Whereas actual service received had a mean score of 39.68, with a maximum score 54 and a minimum score of 7. Mean score evaluation of service quality is 89.04, with a maximum score of 120 and a minimum score of 41.

1.4 Level of expected services, actual services received and evaluation of service quality

1.4.1 Level of expected services

Table 7: Percentage distribution of expected services ⁽¹⁾

| Level of expected service | Number (person) | Percentage |
|----------------------------|-----------------|--------------|
| Service expectation | | |
| Low level (0 – 33) | 51 | 12.8 |
| Moderate level (34 – 52) | 285 | 71.3 |
| High level (53 – 54) | 64 | 16.0 |
| Total | 400 | 100.0 |

The level of expected service is classified into three groups, i.e. low level (0 - 33), moderate level (34 - 52), and high level (53 - 54). Table 7 shows that more than half (71.3 percent) of the sample had a moderate level of expectation (34 - 52) towards services, followed by a high level (16.0 percent) and a low level (12.8 percent) respectively

⁽¹⁾ Classification of level of expected services is obtained by calculating the standard deviation (S.D.) of expected services to find + and - values and mean of expected service. The calculated values fall in the moderate level, and other values are low and high levels.

1.4.2 Actual services received

Table 8: Percentage distribution of level of services received ⁽²⁾

| Level of actual service received | Number (person) | Percentage |
|----------------------------------|-----------------|--------------|
| Actual service received | | |
| Low level (0 – 30) | 53 | 13.3 |
| Moderate level (31 – 48) | 279 | 69.8 |
| High level (49 – 54) | 68 | 17.0 |
| Total | 400 | 100.0 |

Level of actual services received is classified into three groups, i.e. low level (0 - 30), moderate level (31 - 48), and high level (49 - 54). Table 8 shows that about 69.8 percent of the sample stated that the actual services received are at a moderate level (31 - 48), followed by a high level (17.0 percent) and a low level (13.3 percent) respectively.

1.4.3 Evaluation of service quality

Table 9: Percentage distribution of service quality ⁽³⁾

| Level of evaluation of service quality | Number (person) | Percentage |
|--|-----------------|--------------|
| Low level (1 – 71) | 68 | 17.0 |
| Moderate level (72 – 106) | 253 | 63.3 |
| High level (107 – 120) | 79 | 19.8 |
| Total | 400 | 100.0 |

⁽²⁾ Classification of level of actual services received is obtained by calculating the standard deviation (S.D.) of actual services received to find + and - values and mean of actual services received. Calculated values falls into the moderate level, and other values are low and high levels.

⁽³⁾ Classification of level of evaluation of service quality is obtained by calculating the standard deviation (S.D.) of evaluation of service quality to find + and - values and mean of evaluation of service quality. Calculated values fall into the moderate level, and other values are low and high levels.

Evaluation of service quality is classified into three levels, i.e. low level (1 - 71), moderate level (72 - 106), and high level (107 - 120). Table 9 shows that the majority (68.8 percent) of the sample evaluated the service quality at a moderate level (72 - 106), followed by a high level (17.3 percent) and a low level (14.0 percent) respectively.

Part 2: Relationship between various factors and evaluation of service quality

2.1 Comparison between individual characteristics and evaluation of service quality

Table 10: Comparison between individual characteristics and evaluation of service quality

| Individual characteristics | Level of quality evaluation | | | Statistic value | |
|---|-----------------------------|-------|--------------------|-----------------|----------------|
| | Number (person) | Mean | Standard deviation | T-Test | F-Test |
| Sex | | | | 2.409* | |
| Male | 112 | 92.36 | 16.64 | | |
| Female | 288 | 87.75 | 17.36 | | |
| Age | | | | | 2.473* |
| < 20 yrs | 50 | 90.54 | 16.77 | | |
| 20-29 yrs | 78 | 87.69 | 18.22 | | |
| 30-39 yrs | 93 | 85.10 | 17.00 | | |
| 40-49 yrs | 78 | 88.59 | 18.58 | | |
| 50-59 yrs | 62 | 92.79 | 14.33 | | |
| > 60 yrs | 39 | 94.18 | 16.42 | | |
| Education | | | | | 5.711** |
| Primary level or lower | 161 | 92.34 | 15.66 | | |
| Secondary level | 178 | 88.27 | 16.65 | | |
| Bachelor degree | 57 | 83.40 | 21.07 | | |
| Higher than bachelor Degree | 4 | 71.25 | 16.48 | | |
| Income | | | | | 1.284 |
| < 3,000 Baht/month | 189 | 90.01 | 16.94 | | |
| 3,001- 6,000 Baht/month | 99 | 90.02 | 17.22 | | |
| 6,001- 9,000 Baht/month | 50 | 83.72 | 14.84 | | |
| 9,001-12,000 Baht/month | 22 | 88.36 | 18.50 | | |
| 12,000-15,000 Baht/month | 19 | 91.47 | 17.93 | | |
| > 15,001 Baht/month | 21 | 86.90 | 22.60 | | |
| Experience in using hospital service | | | | 0.990 | |
| Never | 128 | 87.80 | 18.48 | | |
| Ever | 272 | 89.63 | 16.66 | | |

* significantl at 0.05 level ** significantl at 0.01level

Table 10 shows that income and experience in using hospital services had insignificant effects on evaluation of hospital service quality. Sex, age, and education are factors that are significantly related to evaluation of service quality.

Males evaluated the quality of hospital services at a higher level than did females, i.e. mean value for males and females are 92.36 and 87.75 respectively. There is a significant difference ($p < 0.05$) between the mean score of males and females.

It was found that there are significant differences ($p < 0.0$) between the mean scores of evaluation of hospital service quality among different age groups. Those aged 60 years of age and over had the highest mean values, followed by the 50 - 59, and 30 - 39 age groups respectively.

Pairs test with the Least Squared Difference (LSD) method showed a significant difference ($p < 0.05$) of mean values of evaluation of hospital service quality between several age groups. That is, the patients aged 50 - 59 years had higher mean scores than the age group 30 - 39 years. The same result was found among those aged over 60 years than respondents aged 30 - 39 years.

Similarly, significant differences ($p < 0.01$) of mean scores on evaluation of service quality were found between patients with different educational levels. Respondents with a primary school level or lower evaluated the service quality at the highest level, followed by those with secondary, bachelors degree, and higher than bachelors degree level respectively.

Pairs test by the LSD method suggested significant differences ($p < 0.01$) of mean scores among the patients with different educational level. That is, the patients with primary education or lower evaluated the hospital service quality at higher levels than those with secondary education, bachelors degree level and higher, while the rest had more or less the same mean score.

Overall, there is no significant difference in mean evaluation scores among the patients with different incomes. However, the pairs test by LSD showed a significant difference ($p < 0.05$) between some groups, i.e. the patients who earned less than 3,000 Baht monthly income evaluated hospital service quality at a higher level

than those who earned between 6,001 - 9,000 Baht per month. The same result was found of those who earned between 3,001 - 6,000 Baht per month and those with income of 6,001 - 9,000 Baht per month, while the rest had similar evaluation results.

With respect to experience in using hospital services, the results showed that evaluation of hospital service quality is not different among the patients who ever and never used services identified in the health card, with a non significant difference of mean scores among the two groups. Those who ever and never used hospital service with the gold health card had mean scores of evaluation of service quality of 89.63 and 87.80 respectively.

2.2 Comparison between expected / actual service received and hospital services under the universal coverage health insurance policy

Table 11: Comparison between expected service / actual service received and the services under universal coverage health insurance policy

| Variables | Number (person) | Mean | S.D. | t | P |
|--------------------------|-----------------|-------|------|---------|-------|
| Expected services | 400 | 42.99 | 8.95 | 7.232** | 0.000 |
| Actual services received | 400 | 39.68 | 8.24 | | |

*** significant at 0.01level*

Analysis was undertaken to compare expected services/actual services received and hospital services under the universal coverage health insurance policy. As shown in Table 11, the mean score of expected services (42.99) is higher than that of the mean values of actual services received (39.68).

When examining the relationship between variables, the analysis revealed significant differences ($p < 0.01$) between the value of expected services and actual services received. That is, the mean score of expected services is significantly higher than that of the actual service received. The analysis thus pointed out that the expectation of service of the patients is higher than the services they received.

2.3 Relationship between expected service actual services received and evaluation of service quality

Table 12: Relationship between expected service/actual services received and evaluation of service quality

| Variables | Evaluation of service quality | |
|--------------------------|-------------------------------|----------|
| | R | P- value |
| Expected services | 0.362** | 0.000 |
| Actual services received | 0.819** | 0.000 |

** significant level at 0.01

In Table 12, the Pearson Correlation Coefficient show significant a positive correlation ($p < 0.01$) between expected service, actual service received and the evaluation of service quality. However, expected services had a low level of relationship with evaluation of service quality ($R = 0.362$, $P\text{-value} = 0.000$). In contrast, the actual service received had a high or very high level of relationship with the evaluation of service quality ($R = 0.819$, $P\text{-value} = 0.000$). The analysis suggested that if the patients received sufficient services, they tended to make a positive evaluation on service quality.

2.4 Relationship between differences in expected services and actual service received with evaluation of service quality

Table 13: Relationship between differences of expected services and actual services received with evaluation of service quality

| Variables | Evaluation of service quality | |
|---|-------------------------------|----------|
| | R | P- value |
| Difference between expected services and actual services received | -0.383** | 0.000 |

** significant level at 0.01

As shown in table 13, the difference in values between expected service and actual service received had a significant negative association ($P < 0.01$) with evaluation of service quality. That is, if the expected service is higher than the actual service received,

the patients tend to make a negative evaluation of service quality, and a positive evaluation is made in the opposite situation where services received are ranked more highly than expectations.

Part 3: Conclusion

The majority of the respondents in this study are female. Most of the sample are aged between 30 - 39 years. About half completed a secondary level of education. Most earned less than 3,000 Baht per month. There are 7 out of 10 who had previous experience of using hospital services.

The respondents had a higher level of expectation towards service behavior factors than the service system factors. Regarding actual services received, the sample also gave a higher mean score for service behavior factors than service system factors. Their mean of expected services is higher than the mean value of actual service received.

Considering the relationship among variables in this study, it was found that sex, age, education are factors that affect the evaluation of service quality. That is, expected service had a low positive relationship with the evaluation of service quality, whereas the actual service received had high or very high positive relationship with the evaluation of service quality. However, score difference between expected and actual services received had a negative relation with the evaluation of service quality.

CHAPTER V

DISCUSSION

This research aims to identify the individual characteristics of the out-patients that effect their evaluation of hospital service quality; to compare the expected services and actual services received against the services under the universal health insurance policy; and to examine the relationship between expected services/actual services received and the evaluation of service quality. The results are discussed in the following aspects:

- 5.1 Individual characteristics of the sample
- 5.2 Comparison of general factors effecting the evaluation of service quality
- 5.3 Comparison of expected services and actual services received compared with the services under the universal health insurance policy in Nonthaburi province
- 5.4 Relationship between expected services/actual services received and evaluation of service quality

In this study, primary data was used for quantitative analysis. The sample consists of patients aged over 15 years receiving services from government hospitals in Nonthaburi province, under the universal health insurance project. The researcher employed probability theory in designing systematic sampling among patients who have gold health cards in seven hospitals, with the number of patients sampled in each hospital proportionate to the number of gold cards issued to each hospital. Total sample size is 400.

Data analysis was undertaken using percentages to describe individual characteristics of the sample. Mean, maximum and minimum values, and standard deviations were presented on expected service quality, level of actual services received, and evaluation of service quality. T-tests and ANOVA for Oneway Classification were employed to examine the relationship between individual characteristics of the sample and evaluation of service quality. Pearson Product Moment Correlation Coefficient was used to

examine the association between actual services received and expected services, and the association between the difference of expected services/actual services received and evaluation of service quality.

5.1 Individual characteristics of the sample

Based on the sample of patients using government hospital services in Nonthaburi province under the universal health insurance project, it was found that the majority of the sample (72.0 percent) is female, which is similar to the result of the studies of Viroj Tangcharoensatian, et. al (1996: 159) and Kusol Soonthornthada & Vorachai Tongthai (1996: 20). Wilson, R.M. (1970: 77) has explained that females are more likely to seek medical counseling than are males and also are familiar with hospital regulations and rules. Hence they become more satisfied with the services and would rather see a doctor than would males. This is because the morbidity rate is more pronounced among females than males, therefore, females worry and decide to seek more prompt treatment than do males.

The respondents are aged 38 years on average. The majority fall in age group 30 – 39 years. The patients who most utilized hospital services are at the labor force ages (23.33 percent), while the least utilized are those over 60 years of age (9.8 %). The data suggested that there is an error in issuing the health cards for those over 60 years of age who are entitled to receive the gold health card free medical treatment. This group previously received the poor income and welfare card.

Among the respondents, almost half (44.5 percent) had completed a secondary level of education. This is because Nonthaburi is a peripheral area of Bangkok, so it has an advanced education and communication system that is conducive to greater educational opportunity than the compulsory level of education (Grade 6).

Most of the respondents earned less than 3,000 Baht per month, the lowest income group. More than half of them had experience using hospital services with the

gold cards. Since most of them had low income, they were more likely to use government than private hospital services (Appendix C, Table P.8) because of lower treatment charges. This is consistent with the study of Santad Sermisri and Reiley (1974: 58) who found that those with high income expected to receive good services for the money they pay. Whereas the lower income group chose to use government hospital services without any expectation other than just to pay less. Hence, most of the sample had experienced using hospital services defined in the health cards.

Moreover, the results shows that prior to implementing the universal health insurance project, three out of five respondents usually received treatment when becoming ill in the same hospital identified in the gold card (Appendix C, Table P.7). In comparison, after implementing the universal health insurance project, most of the sample thought that hospital services were better than before (Appendix K, Table P.10). Since the announcement of the health insurance committee on standard criteria of health service facilities and service networks on 27 June 2002, the hospitals under the universal coverage health insurance project must report to show the development of service quality (Office of Health Insurance, Law & Regulation Section, 2001). In addition, the universal health insurance policy emphasizes hospital service system accreditation to ensure service quality. Therefore, hospitals enrolled in this project thus need to develop their service quality to be accredited.

5.2 Comparison of individual characteristics effecting the evaluation of service quality

Consistent with the research hypotheses of the study, it was found that individual characteristics effect the evaluation of service quality of the government hospitals under the universal health insurance scheme. The three variables with statistically significant relationships are sex, age, and education.

Sex

On average, males evaluated hospital service quality at a higher level than did females. This finding does not conform to the results reported in various research. This may be because of the nature of males, in that they usually pay less attention to details than do females in both the service system and service behavior, hence they failed to look at the details provided by the hospital. In addition, males are able to adjust themselves better to the environment. Therefore, males usually give a higher score on evaluation of hospital service quality than do females. Moreover, males are less likely to become sick than females, thus utilizing less hospital treatment than females. So they have less exposure to any changes of the hospitals. Females usually notice any errors of the hospital staff, so they are likely to give lower scores on evaluation of hospital service quality than do males

Age

Age is another factor effecting evaluation of hospital service quality. Patients aged over 60 years gave the highest score for evaluation of hospital service quality. This finding is consistent with the findings from the studies of Supattra Liamvarangkul (1997: 89), Suwaporn Naewchampa (2002: 78), and Pradradchya Pasook (1966: iv). It may be that the older patients had more experience in life, so they usually compared their past experiences in using hospital services with their current received services. Therefore, they are more satisfied with the current service system and service behavior than that of the younger patients, hence giving a higher score than the younger patients when evaluating hospital service.

Education

Education is also a factor effecting medical needs and expected service. The results showed that highly educated out-patients gave low scores in their evaluation of service quality, while the less educated gave higher scores. The results agree with the findings of the studies of Anong Uewattana (1999: 88), Piyanuch

Phromsaka Na Sakolnakorn (1997: 62), Suwaporn Naewchampa, (2002: 74), and Sutarga, I. (1998: ii). The analysis suggests that education is a crucial factor through which the patients perceive information from the government sector. Hence, higher education level might have resulted in an expectation that the 30 Baht scheme needed to include every disease and excellent services, while in fact it does not cover some disease treatment and services. This has caused problems between service providers and receivers, leading to some complaints. The more highly educated compared such high expectations with the actual services received, and thus evaluated the service quality at a low level.

5.3 Comparison of expected services and actual services received with the service under the universal health insurance policy in Nonthaburi province

Consistent with the hypothesis, the results suggest that the expectation of the respondents towards the service of the hospitals implementing the universal coverage health insurance policy is higher than the actual service received. In other words, the evaluation of service quality showed that expected service is higher than the actual service they received. The mean value of expected service was 42.99 (maximum = 54), and the mean value of actual services received was 39.68 (maximum = 54). This is because the government had addressed the issue of 30 Baht treatment as a policy priority during their election campaign, therefore the people had high expectations that they would have rights to receive medical treatment without bearing much expense. However there was some misunderstanding. The findings showed that about half of the respondents (44.8 percent) were uncertain and did not understand about the rights and benefits of the gold health cards under this project (Appendix C, Table P.4). They might expect the services and compared them to the actual service received. Because their expectation is higher than the actual services received, there is a gap created, and there is a need for some improvement regarding the services and public relations and information activities to reduce such a gap.

Service system

When considering by item, the highest expectation was recorded for medical equipment and devices with a mean value of 2.42 (maximum = 3). Since such equipment is essential for hospital service, the patients expected that it should be clean, modern, in good quality, in adequate numbers, and readily available at all times. And because medical treatment is concerned with human life, well prepared equipments would bring efficient and fast treatment. The Joint Commission on Accreditation of Health Care Organization (JCAHO) (cited in Srirattanabuk, et.al, 2001: 9-11) summarized the indicators of patient care quality in 11 items, and one among them is "necessary equipment should be well prepared to provide prompt treatment to the patients when needed". The study of Viroj Tangcharoensatian, et.al (1996: 158-168) of hospital service quality in patients' perspectives stated that one reason people utilized hospital services is due to availability of advanced medical equipment. This finding agrees with the findings from the studies of Benjamas Sirikamolstian (1999: 81), Anong Uewattana (1999: 89), Sakaowadee Duangden (1996: 158). However, the mean score of actual services received, especially for medical equipment is 2.25 (maximum = 3), which is lower than the value (2.42 from 3) of expected service.

Mean scores of both expected and actual services received for medical equipment are at moderate levels with a low mean score difference. This is may be due to the fact that most respondents earned less than 3,000 Baht per month (47.3 percent), so they had low expectations about the service. In addition, since they have to pay only 30 Baht for each hospital visit, they might not expect much from a service received for such little cost, as long as available medical equipment can save their lives. The results suggest that the people in Nonthaburi province are pleased to pay an extra over 30 Baht (Appendix C, Table P.15). For better and more convenient services (Appendix C, Table P.16). The affordable cost stated by people ranged between 51 and 100 Baht (Appendix C, Table P.18).

Service behavior

The findings indicate that the highest expectation was placed on service equality, with a mean score of 2.48 (maximum = 3). One objective of the universal health insurance policy is equality of rights without discrimination and double standards (Office of Health Service System reform, 2001:15 - 16). Under this project, most patients do not want to receive a poor or a second class service but prefer to receive equal services for self paid or for only 30 Baht paid because they need medication and medical equipment of the same standard. Orachorn Archarit (1998) studied the components of service quality of center hospitals and general hospitals as expected by the patients in the southern part of Thailand. She found that the variable that explains the important ethics and morale of service providers is "equal service without discrimination". Similarly, Attachai Poomaphan, et.al (1995: 68-70) conducted a survey of out-patient service management in every community hospital in Srisaket province in 1994 and found that one factor that the patients expected or need from hospital service is service equality. The mean score given for expected service is 2.35 (maximum = 3) which is lower than the value (2.48 from 3) given for actual services received.

It can be seen that the mean scores of both expected and actual services received on service equality are at a moderate level, with somewhat low mean score difference. This is because most of the sample are unemployed, and as high as 42.3 percent are the housewives (Appendix C, Table P.3), and are those who have never received any medical welfare (62.0 percent) (Appendix C, Table P.5). So they thought that receiving medical treatment with only 30 Baht paid per visit means they already had health insurance and are able to see the doctor or to seek hospital treatment when they were sick, comparing to the full payment before implementing this project. Therefore, the respondents regard service equality as equal access to health service without financial concern, and with the same standard as others receive.

5.4 Relationship between expected services/actual services received and evaluation of service quality

Consistent with the hypothesis, the results showed that service quality has a low positive association ($r = 0.362$) with expected and actual services received. However, the researcher thinks that studying patients expectations is beneficial since the data can serve hospital administrators in managing the universal health insurance service so that it is most responsive to patient needs, and so that it can reduce the gap between expected services and the basic standard services.

In contrast, the actual services has high or very high ($r = 0.819$) positive association with evaluation of service quality. Evaluation was based on patient perceptions after receiving the treatment. If the patients received good service in both aspects of the service system and service behavior, they tend to revisit for services, or recommend the hospital to their relatives and friends. These can be treated as indicators to measure patient satisfaction and evaluation of service quality.

According to Oberst's theory (1984: 2366-2367), when patients evaluate hospital service quality, they usually compare their expected services to the actual service received. If the expected services are rated higher than the actual services, they make a negative evaluation, and make positive evaluation in the opposite situation. The results of this study showed that the difference between expected and actual services had an inverse relationship ($r = -0.383$) with evaluation of service quality. In other words, if the expected service is rated higher than the actual service received, the patients would make a positive evaluation of the services. Service providers or the hospitals need to understand the client expectations and take them into account for maintaining quality service. Moreover, hospital administrators should treat and prioritize service quality as the main hospital policy and objective, while creating a positive hospital image that emphasizes providing services that impress the public.

CHAPTER VI

CONCLUSION

This quantitative study on "Evaluation of service quality of the hospitals implementing the universal coverage health insurance policy: a case study of Nonthaburi province" has the following objectives:

1. To identify individual characteristics that effect the evaluation of service quality.
2. To compare expected service/actual services received against the services provided under the universal coverage health insurance policy, in Nonthaburi province.
3. To examine the relationship between expected service / actual services received and evaluation of service quality.

Primary data was used for quantitative analysis. The sample consists of out-patients aged over 15 years who received government hospital services under the universal coverage health insurance project in Nonthaburi province during 1 - 31 October 2002. The researcher employed probability theory in designing and implementing systematic sampling among the patients who have the gold cards in seven hospitals, with sample size from each hospital proportionate to the number of gold card holders for each hospital. Total sample size was 400.

Information from completed questionnaires was analyzed by using statistical techniques as follows:

1. **Descriptive statistics:** Mean, percentage, maximum and minimum values, and standard deviation were used to describe individual characteristics, expected services, actual services received, and evaluation of service quality.

2. **Analytical statistics:** Comparison of mean scores of evaluation of out-patient service quality was made by using t-test, while ANOVA for Oneway Classification was used to compare means for the out-patients with different individual

characteristics. Pearson Product Moment Correlation Coefficient was employed to examine the relationship between the expected service/actual services received and the evaluation of service quality. Level of statistical significance was defined at 0.05.

6.1 Conclusions

The sample of those receiving out-patient services at government hospitals under the universal coverage health insurance policy in Nonthaburi province was aged 38 years on average. They mainly had completed an education level higher than the compulsory level of education. Most of them earned less than 3,000 Baht per month. More than half had experience in using those hospital services stated in the gold cards.

Evaluation of service quality of government hospitals under this project according to patient perspectives suggested that the majority (68.8 percent) of the sample had evaluated the service quality at a moderate level (score = 72 - 106). About 17.3 percent had evaluated services at a high level (score = 107 - 120). Only 14.0 percent had given a low level (1 - 71).

Considered by item, the highest evaluation was for service behavior, especially service equality (mean = 3.79, maximum = 5), and the lowest score was given for service system for the item adequate number of health personnel (mean = 3.48, maximum = 5). According to patient' opinion, the very first service problems related to waiting time and inadequate number of personnel, both of which need to be urgently solved. The analysis revealed the following.

1. Individual characteristics had an effect on evaluation of service quality. Evaluation of service quality was significant different ($p < 0.05$) among patients with different sex, age, and level of education. Males provided higher mean evaluation scores than did females, and the same was found among those aged over 60 years of age compared with younger respondents. Similarly, evaluation of service quality was higher among patients with a primary or lower level of education compared to those with higher education.

2. Expected services were different from the actual services received under the universal coverage health insurance project. It was found that the mean value of expected service was significant different ($p < 0.01$) from the mean value of services received, i.e. expected services were rated higher than actual services received.

3. Service quality had a relationship with expected and actual services received. The results suggest that expected services and actual services received had a positive association with evaluation of service quality. Expected services had a low level of positive relationship with evaluation of service quality. The actual services received had a high or very high level of relationship with evaluation of service quality. According to Oberst's theory (1984; 2366-2367), expected and actual services received as perceived by patients is defined by the difference between expected services and actual services received. In this study, the difference between the expected and actual services received had a negative association with evaluation of service quality. This finding is consistent with Oberst's theory (1984: 2366-2367).

6.2 Recommendations for utilization of research results

The findings reflect the opinion and ideas of the out-patients in the hospitals under the universal coverage health insurance project. The researcher has therefore made recommendations for further utilization of the research results so as to facilitate the implementation of the universal health insurance project in ways that are relevant to the government health insurance policy, and to meet the expectations of the people. Moreover, necessary adjustment and revision of hospital service policy could also be undertaken in order to create a positive impression among patients.

1. Administration recommendations

1.1 In some hospitals, the registration room, examination room, and dispensary room for the gold card patients are separated from those of general patients. This is to facilitate convenient and fast management. However, this might create a

negative effect, especially for general patients. They might feel discriminated against, or feel they are receiving poor or second class services. It is recommended that the hospital should have a population data base classifying patients in different categories instead of providing separate rooms.

1.2 Information on patient opinion towards the universal health insurance services showed that waiting time ranks first among service problems (Appendix C, Table P.12). It is suggested that the hospitals should provide additional services and facilities such as television and health magazines, etc. to entertain the patients while waiting for examination or treatment. Other activities such as public relations/ information/ answering questions on the universal health insurance project and the benefits and rights of the gold cards would be useful.

1.3 To avoid overcrowding of patients in hospital, mobile clinics should be operated to provide knowledge to the people in the community as follows :

- Providing health knowledge, e.g., seasonal diseases and basic skill in first aids, and conducting campaigns to promote healthy behavior and reducing health hazard behavior. These activities are conducive to the use of hospital services, and help reducing morbidity, while people are enabled to practice self health care, to develop their quality of life, and might reduce unnecessary use of hospital services.

- The hospitals should provide knowledge and understanding regarding patient rights and benefits of treatment under the universal health insurance project. They should also emphasize knowledge and understanding on when and where to use the services. The result showed that about 44.8 percent of the sample did not know and understand about the rights and benefits of the gold card (Appendix C, Table P.4). Efficient public relations would help reduce the huge amount of budget spent for medical treatment, as would reducing high levels of service expectation from the hospitals under the universal health insurance project.

1.4 Some hospitals have limited number of doctors, lack doctors, are located in the remote area, or have inadequate number of doctor for the number of patients, and have to combat h many diseases in their responsible areas. Hence, they

have v less time to spend for each case, sometimes giving little attention to patients. Actually, the doctors need to pay attention to the patients both physically and mentally since it has an effect on service quality.

2. Policy recommendations

2.1 The government aims to create universal coverage of health insurance and to ensure equal access of health services, especially for disadvantaged groups. However, it is important to also create awareness among people regarding their duties to take care of their own health. Hence the government should promote, support, and coordinate various health care activities to cover the following aspects:

- Health promotion. The government should pay attention to the health of people by creating awareness to promoting their own health, both physically and mentally, actively and continuously, including dietary behavior and environmental health, promotion of physical exercise, rest and relaxation, etc.

- Disease prevention and control. The government should increase public relations and information activities to cover every population group regarding knowledge about diseases and how to prevent them. They should focus on an expanded programme of immunization among high risk groups and those in the remote areas in order to prevent and eliminate various communicable diseases.

- Rehabilitation. People should have access to health services whenever needed. They should also receive the same quality and standard services. The government should emphasize self care after recovery from the disease to prevent repeated illness.

In the long term, people will pay more attention to their health. When they become ill, they will have the knowledge and have basic skills to take care of themselves, or consult with a doctor about the side effects of the treatment. This will help strengthen participation in health care. More importantly, the government can save health expenses and spend more in developing and sustaining other socio-economic activities.

2.2 The government should promote and include public representatives in hospital administrative committees so that :

- The people can be involved in hospital management, which should be transparent and accountable, with efficient spending.
- Public representatives are able to undertake public relations on the rights and benefits under the 30 Baht coverage project, reflect problems regarding errors and issuing repeated gold health cards. While the hospital can solve the problems.

2.3 The government should establish a management information system for the universal health insurance project including :

- Population data base and classification patients into insurance and non-insurance categories, update information and prevent error and repeated card issuance.
- Service system allowing people to reflect their opinion, problems, and needs, including public inspection and complaints.

This information would help monitoring the project and control service quality. It would also help determine the coverage and equity under the scheme.

2.4 The government should provide choices of hospitals in order to create service competition. Measurement and methods are defined to facilitate self sufficiency among small hospitals. University hospitals should not be included in the 30 Baht coverage treatment project but should serve as referral points from the hospitals under the project.

2.5 An inspection unit should be established to maintain standard treatment of services. Active and passive inspection criteria, including information disclosure, would build competitions among hospitals under the project.

6.3 Recommendations for further research

1. This study used quantitative research methods and therefore not all issues may have been covered in detail. Qualitative research should thus be undertaken to

obtain complete details, including explanation of subjective phenomenon, and patient's in-depth opinions.

2. Evaluation of service quality in this research focused only on out-patients. However, it might not complete the overall picture due to lack of in-patients opinions. Therefore, further studies should include in-patients opinions.

3. Due to limited time, this study could not be undertaken longitudinally in order to examine the quality of medical treatment and outcomes. Hence, studies of evaluation of medical treatment quality and project evaluation should be continuously undertaken.

4. It is suggested that studies that focus on the attitudes of hospital administrators, community leaders, and the people who did not use the services under the universal coverage health insurance project, be conducted including evaluation of personnel satisfaction. This would allow personnel to express their ideas, describe difficulties of implementing the '30 Baht scheme', and cooperate in seeking solutions.

BIBLIOGRAPHY

ภาษาไทย

- กันยา กาญจนบุรานนท์. (2536). การบริการสุขภาพ ในการสาธารณสุข 1. (เล่มที่ 1, พิมพ์ครั้งที่ 12, หน้า 65-66). นนทบุรี : สาขาวิชาวิทยาศาสตร์สุขภาพ มหาวิทยาลัยสุโขทัยธรรมาธิราช.
- กาญจนา บุตรชน. (2536). การศึกษาสภาพปัจจุบันและความคาดหวังของประชาชนจังหวัดร้อยเอ็ดต่อการบริการการพยาบาลในโครงการบัตรสุขภาพ. วิทยานิพนธ์หลักสูตรปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการบริหารการพยาบาล บัณฑิตวิทยาลัยจุฬาลงกรณ์มหาวิทยาลัย.
- กุลธน ธนาพงศธร. (2522). นโยบายของรัฐ อะไร ทำไม และอย่างไร. กรุงเทพฯ : โรงพิมพ์มหาวิทยาลัยธรรมศาสตร์.
- กุลเรือง สายชุ่มอินทร์. (2535). ความต้องการและปัญหาของประชาชนต่อบริการของโรงพยาบาลเอกชนในอำเภอบ้านโป่ง จังหวัดราชบุรี. วิทยานิพนธ์หลักสูตรปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกบริหารสาธารณสุข บัณฑิตวิทยาลัยมหาวิทยาลัยมหิดล.
- กุลศล สุนทรธาดา และวรชัย ทองไทย. (2539). ลักษณะผู้ใช้บริการและปัจจัยกำหนดการใช้บริการรักษาพยาบาลในภาคเอกชน. นครปฐม : สถาบันวิจัยประชากรและสังคม มหาวิทยาลัยมหิดล.
- เกศณีย์ ประพุทธีวิทยา. (2540). ความพึงพอใจของผู้ใช้บริการที่มีต่อการบริการพยาบาลของแผนกผู้ป่วยในโรงพยาบาลลานนา. วิทยานิพนธ์ปริญญาามหาบัณฑิต มหาวิทยาลัยแม่โจ้.
- จิรุตม์ ศรีรัตนบัลล์ และคณะ. (2544). เครื่องชี้วัดคุณภาพโรงพยาบาล Hospital Quality Indicators. (พิมพ์ครั้งที่ 4). กรุงเทพฯ : บริษัท ดีไซร์ จำกัด.
- จิรุตม์ ศรีรัตนบัลล์. (2537). คุณภาพของการบริการทางการแพทย์กับแนวคิดทางการตลาด. จุฬาลงกรณ์เวชสาร, 38 (4), 169-178.
- คุณฎี ใหญ่เรืองศรี. (2541). คุณภาพบริการตามความคาดหวังที่มีความสัมพันธ์กับความพึงพอใจในการบริการรักษาพยาบาลของพรภิกษุอาพาธในหอผู้ป่วยใน โรงพยาบาลสงฆ์ กระทรวงสาธารณสุข. วิทยานิพนธ์วิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกการบริหารโรงพยาบาล บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

- ทรงทิพย์ วงศ์พันธ์. (2541). คุณภาพบริการตามความคาดหวังและการรับรู้ของผู้รับบริการในงานผู้ป่วยนอกโรงพยาบาลรัฐ จังหวัดสุพรรณบุรี. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกการบริหารโรงพยาบาล บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.
- ชัยธร ธรรมรักษ์. (2542). ความพึงพอใจของผู้ประกันตนต่อบริการผู้ป่วยนอกโรงพยาบาลพระนั่งเกล้า. วิทยานิพนธ์หลักสูตรปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกบริการสาธารณสุข บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.
- นงคราญ ผาสุข ถักขณา ธรรมไพโรจน์ และเพ็ชรดี เปี่ยมมงคล. (2524). องค์ประกอบที่ทำให้เกิดความเครียดในผู้ป่วยที่มารับบริการในแผนกผู้ป่วยนอกของโรงพยาบาลรามาริบัติ. รายงานการวิจัย ภาควิชาพยาบาลศาสตร์ คณะแพทยศาสตร์ โรงพยาบาลรามาริบัติ มหาวิทยาลัยมหิดล.
- นัยนา เกิดวิชัย. (2541). รัฐธรรมนูญแห่งราชอาณาจักรไทย พุทธศักราช 2540. กรุงเทพฯ : โรงพิมพ์พิทักษ์อักษร.
- เบญญาทวกร ไชสง. (2541). ความพึงพอใจต่อบริการของโรงพยาบาลชุมชนในจังหวัดบุรีรัมย์. วิทยานิพนธ์ปริญญาศึกษาศาสตรมหาบัณฑิต สาขาวิชาวิจัยประชากรและสังคม บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.
- เบญจมาศ ศิริกมลเสถียร. (2542). ความพึงพอใจของผู้ป่วยในต่อการบริการของโรงพยาบาลสมเด็จพระยุพราชเดชอุดม อำเภอเดชอุดม จังหวัดอุบลราชธานี. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกการบริหารโรงพยาบาล บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.
- ประเวศ วะสี. (2543). สุขภาพในฐานะอุดมการณ์ของมนุษย์. (พิมพ์ครั้งที่ 4). กรุงเทพฯ : บริษัทพิมพ์ดี จำกัด.
- ปรีชา ครามะคร่า. (2538). ปัจจัยที่มีความสัมพันธ์กับความพึงพอใจของผู้ป่วยนอกที่มาใช้บริการ ณ แผนกผู้ป่วยนอก โรงพยาบาลพระปกเกล้าจันทบุรี. วารสารวิทยาลัยพยาบาลพระปกเกล้าจันทบุรี, 6 (กรกฎาคม – ธันวาคม), 104-110.
- ปานบตี เอกะจัมปกะ และคณะ. (2544). การประเมินคุณภาพบริการตามความคิดเห็นของประชาชนผู้มารับบริการแผนกผู้ป่วยนอก โรงพยาบาลทรวงอก ในระยะเปลี่ยนผ่านของโครงการสร้างหลักประกันสุขภาพถ้วนหน้า. รายงานการวิจัย. โรงพยาบาลโรคทรวงอก กระทรวงสาธารณสุข.

- ปิยวรรณ ประคุณคงชัย. (2533). ความพึงพอใจของผู้ป่วยนอกต่อบริการของโรงพยาบาลของรัฐ: ศึกษากรณีจังหวัดนครสวรรค์. วิทยานิพนธ์ปริญญาโทศึกษาศาสตร์มหาบัณฑิต สาขาวิจัย ประชากรและสังคม บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.
- ปิยะนุช พรหมสาขา ณ สกลนคร. (2540). ความพึงพอใจของมารดาหลังคลอดต่อบริการพยาบาลที่ได้รับ. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต สาขาวิชาการพยาบาลมารดาและ ทารก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.
- พนิดา คำยุ. (2538). คุณภาพบริการที่ผู้ป่วยคาดหวังจากพยาบาล และการรับรู้ของหัวหน้าหอผู้ป่วย ต่อคุณภาพบริการที่ผู้ป่วยคาดหวัง โรงพยาบาลของเอกชน กรุงเทพมหานคร. วิทยานิพนธ์ ปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการบริหารการพยาบาล บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.
- พัชรี ทองแผ่. (2540). คุณภาพบริการพยาบาลตามการรับรู้ของผู้ป่วยใน โรงพยาบาลชุมชน เขต 2. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการบริหารการพยาบาล บัณฑิต วิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.
- พัชรี สีโรรส. (2534). การเมืองของกระบวนการนโยบาย. กรุงเทพฯ : โรงพิมพ์มหาวิทยาลัย ธรรม ศาสตร์.
- เพ็ญศรี นายสับดี และคณะ. (2540). ระยะเวลาใช้บริการและความพึงพอใจของผู้ป่วยแผนกผู้ป่วยนอก: โรงพยาบาลกระบี่ จังหวัดภูเก็ต. วารสารกองการพยาบาล, 24 (2), 14-19.
- ภานี แสสนเจริญ. (2539). รายงานการวิเคราะห์ผลงานวิจัยเรื่องการใช้บริการทางการแพทย์และสาธารณสุข ของประชาชน. กรุงเทพฯ : สำนักงานคณะกรรมการวิจัยแห่งชาติ.
- มหาวิทยาลัยสุโขทัยธรรมมาธิราช. (2533). เอกสารการสอนชุดวิชา การบริหารทรัพยากรสาธารณสุข หน่วยที่ 1-7. (พิมพ์ครั้งที่ 4). กรุงเทพฯ : ห้างหุ้นส่วนจำกัดภาพพิมพ์.
- มูลนิธิโกมลคีมทอง. (2542). ป่วย อีจันจากครรภ์มารดาสู่เชิงตะกอน. (พิมพ์ครั้งที่ 3). กรุงเทพฯ : สำนักพิมพ์มูลนิธิโกมลคีมทอง.
- โยธิน แสงวงศ์, พิมพ์พรรณ อิศรภักดี และมาลี สันถาวรณ. (2543). ปัญหาและทุกข์ของประชาชน เมื่อใช้บริการสถานบริการสาธารณสุข. นครปฐม : สถาบันวิจัยประชากรและสังคม มหาวิทยาลัยมหิดล.
- ราชกิจจานุเบกษา ฉบับประกาศทั่วไป 118 ตอนพิเศษ 21 ง วันที่ 2 มีนาคม 2544. เอกสารอัดสำเนา.
- ราชกิจจานุเบกษา ฉบับประกาศทั่วไป 118 ตอนพิเศษ 31 ง วันที่ 2 เมษายน 2544. เอกสารอัดสำเนา.
- ราชกิจจานุเบกษา ฉบับประกาศทั่วไป 118 ตอนพิเศษ 57 ง วันที่ 18 มิถุนายน 2544. เอกสารอัดสำเนา.

- รัชชา กุลวานิชไชยนันท์. (2535). ความพึงพอใจของผู้ประกันตนต่อบริการทางการแพทย์ศึกษาเฉพาะกรณีผู้ประกันตนในเขตกรุงเทพฯ และปริมณฑล. รายงานการวิจัย กรุงเทพฯ : สำนักงานประกันสังคม.
- รุ่งนภา ยางเอน. (2542). การเปรียบเทียบคุณภาพบริการโรงพยาบาลตามการรับรู้ของผู้ป่วยในโรงพยาบาลที่ไว้และไม่ไว้การจัดการคุณภาพโดยองค์กรวม. วิทยานิพนธ์หลักสูตรปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการบริหารการพยาบาล บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.
- วรเดช จันทรศร. (2543). การนำนโยบายไปปฏิบัติ. (พิมพ์ครั้งที่ 4). กรุงเทพฯ : ห้างหุ้นส่วนจำกัด สหายบล็อก และการพิมพ์.
- วรรณฤดี ภูทอง. (2539). ความสัมพันธ์ระหว่างการจัดการด้านคุณภาพบริการพยาบาลที่ให้แก่ผู้ประกันตนกับคุณภาพบริการที่ให้ผู้ประกันตนรับรู้ โรงพยาบาลรัฐ กรุงเทพมหานคร. วิทยานิพนธ์วิทยาศาสตรมหาบัณฑิต สาขาบริหารการพยาบาล บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.
- วารี วนิชปัญญาพล. (2539). ความคาดหวังของผู้ป่วยต่อบริการพยาบาลและการรับรู้ของผู้บริหารการพยาบาลต่อความคาดหวังผู้ป่วย โรงพยาบาลศูนย์และโรงพยาบาลทั่วไป สังกัดกระทรวงสาธารณสุข. วิทยานิพนธ์หลักสูตรปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการบริหารการพยาบาล บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.
- วิมลศรี ศรีสุพรรณ และ มะลิจิตร์ ศิริพัฒนามานนท์. (2536). ศึกษาความพึงพอใจของผู้รับบริการต่องานบริการพยาบาลผู้ป่วยนอก โรงพยาบาลบุรีรัมย์. วารสารการแพทย์โรงพยาบาลศรีสะเกษ สุรินทร์ บุรีรัมย์. 45-55.
- วิโรจน์ ตั้งเจริญเสถียรและคณะ. (2539). คุณภาพบริการโรงพยาบาลในสายตาผู้ป่วย. วารสารวิจัยระบบสาธารณสุข, 4 (3), 158-168.
- ศุภชัย ขาวะประภาส. (2544). นโยบายสาธารณะ. (พิมพ์ครั้งที่ 4). กรุงเทพฯ : สำนักพิมพ์จุฬาลงกรณ์มหาวิทยาลัย.
- สกวดี ดวงเด่น. (2538). คุณภาพบริการที่ผู้ป่วยคาดหวังจากพยาบาล ที่พยาบาลหัวหน้าหอผู้ป่วยรับรู้ความคาดหวังของผู้ป่วย โรงพยาบาลของรัฐ กรุงเทพมหานคร. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการบริหารการพยาบาล บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.
- สงวน นิตยารัมภ์พงศ์. (2540). การปฏิรูประบบบริการสาธารณสุข. อัดสำเนา.
- สมชาย เรื่องศิรินุสรณ์. (2536). บัญญัติสิบประการในการบริการผู้ป่วย. วารสารโรงพยาบาลนพรัตนราชธานี, 4 (มกราคม – เมษายน), 71-72.

- สมทรง เพ็งสุวรรณ และคณะ. (2541). ความคิดเห็นของผู้ใช้บริการและพยาบาลต่อการบริการใน
โรงพยาบาลศิริราช. วารสารวิจัยทางการแพทย์, 2 (มกราคม – มิถุนายน), 108-126.
- สันทัต เสริมศรี และเจมส์ เอ็น ไรลีย์. (2517). พฤติกรรมในการใช้บริการทางการแพทย์สาธารณสุข
และการคุมกำเนิดของคนไทย: การวิจัยในชุมชนแห่งหนึ่ง. รายงานการวิจัย กรุงเทพฯ :
สถาบันวิจัยประชากรและสังคม มหาวิทยาลัยมหิดล.
- สัมฤทธิ์ ศรีธำรงสวัสดิ์. (2543). หลักประกันเพื่อการมีสุขภาพดี. เอกสารประกอบการประชุมกลุ่มย่อย
ทิศทางการปฏิรูประบบสุขภาพ เรื่อง “หลักประกันเพื่อการมีสุขภาพดี” กรุงเทพฯ : 16
มิถุนายน 2543.
- สำนักงานโครงการปฏิรูประบบบริการสาธารณสุข. (2544). 30 บาทรักษาทุกโรคสู่หลักประกันสุขภาพ
ถ้วนหน้า. กรุงเทพฯ : โรงพิมพ์องค์การรับส่งสินค้าและพัสดุภัณฑ์.
- สำนักงานโครงการปฏิรูประบบบริการสาธารณสุข. (2544). แนวทางการสร้างหลักประกันสุขภาพ
ถ้วนหน้าในระยะเปลี่ยนผ่าน. กรุงเทพฯ : โรงพิมพ์องค์การรับส่งสินค้าและพัสดุภัณฑ์.
- สำนักงานโครงการปฏิรูประบบบริหารสาธารณสุข. (2544). ประกันสุขภาพถ้วนหน้าประชาชนจะ
ได้อะไร 30 บาท รักษาทุกโรค ถ้าสงสัยในนี้มีคำตอบ. กรุงเทพฯ : โรงพิมพ์องค์การรับส่ง
สินค้าและพัสดุภัณฑ์.
- สำนักงานปฏิรูประบบสุขภาพแห่งชาติ. (2544). อะไรเป็นอะไร ? ในกระแสการเปลี่ยนแปลง. กรุงเทพฯ :
บริษัท 21 เซ็นจูรี่ จำกัด.
- สำนักงานประกันสุขภาพ ฝ่ายกฎหมายและระเบียบ. (2544). ระเบียบและประกาศที่ใช้ในโครงการ
สร้างหลักประกันสุขภาพถ้วนหน้า. อัดสำเนา.
- สำนักงานสาธารณสุขจังหวัดนนทบุรี. (2544). สรุปผลการดำเนินงานโครงการหลักประกันสุขภาพ
ถ้วนหน้าจังหวัดนนทบุรี. อัดสำเนา.
- สิระยา สัมมาวาจ. (2540). ความพึงพอใจต่อการบริการพยาบาลของผู้ป่วยที่รับไว้รักษาในหอผู้ป่วย
ศัลยกรรมสามัญ โรงพยาบาลรามารับดี. รามารับดีสาร, 3 (กันยายน – ธันวาคม), 286-297.
- สุจิตรา นิลเลิศ. (2539). ความพึงพอใจของผู้ป่วยต่อบริการของโรงพยาบาลของรัฐในจังหวัดสุพรรณบุรี.
รายงานการวิจัย : สำนักงานสาธารณสุขจังหวัดสุพรรณบุรี.
- สุพัตรา เหลี่ยมวรารกุล. (2540). คุณภาพบริการงานกายอุปกรณ์ ศูนย์สิรินธรเพื่อการฟื้นฟูสมรรถ
ภาพทางการแพทย์แห่งชาติ ตามการรับรู้ของผู้รับบริการ. วิทยานิพนธ์ปริญญาวิทยาศาสตร
มหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาการบริหารโรงพยาบาล บัณฑิตวิทยาลัย
มหาวิทยาลัยมหิดล.

- สุรศักดิ์ นานานุกุล และคณะ. (2538). แนวทางของการปรับปรุงคุณภาพและผลิตภัณ์ที่ทั่วทั้งองค์กร. การประชุมวิชาการ เรื่อง กลยุทธ์บริการพยาบาลเพื่อคุณภาพและความพึงพอใจในยุคแข่งขัน. (22-24 สิงหาคม 2538), 103-136.
- อนงค์ เอื้อวัฒนา. (2542). ความพึงพอใจของผู้รับบริการแผนกผู้ป่วยนอก โรงพยาบาลอำนาจเจริญ. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกบริหารสาธารณสุข บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.
- อนุวัฒน์ สุขขุติกุล. (2541). Hospital Accreditation บทเรียนจากแคนาดา. (ฉบับปรับปรุง). กรุงเทพฯ : บริษัท ดีไซร์ จำกัด.
- อเนก สุภีรนนท์. (2537). เปรียบเทียบความพึงพอใจที่คาดหวังของผู้ป่วยแผนกโรคระบบประสาทของโรงพยาบาลประสาทสงขลา. วารสารกรมการแพทย์, 19 (4), 293-297.
- อมร รักษาศักดิ์. (2520). การพัฒนานโยบาย. กรุงเทพมหานคร : สถาบันพัฒนาบริหารศาสตร์.
- อรรถ อาชาฤทธิ์. (2541). ตัวประกอบคุณภาพบริการของโรงพยาบาลศูนย์และโรงพยาบาลทั่วไปตามความคาดหวังของผู้ป่วยใน ภาคใต้. วิทยานิพนธ์หลักสูตรปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการบริหารการพยาบาล บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.
- อรพินท์ ไชยพยอม. (2542). ความพึงพอใจของผู้รับบริการต่อบริการของแผนกผู้ป่วยนอก โรงพยาบาลศิริราช. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกบริหารสาธารณสุข บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.
- อรพินท์ บุญนาค และอัจฉรา เอ็นซ์. (2539). โครงการศึกษาความพึงพอใจและความต้องการของประชาชนต่อศูนย์บริการสาธารณสุขและโรงพยาบาลชุมชนในสังกัดกรุงเทพฯ. รายงานการวิจัย กรุงเทพฯ : สถาบันประชากรศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย.
- อรรถชัย ภูมาพันธ์ และคนอื่นๆ. (2538). การจัดระบบบริการผู้ป่วยนอกแนวใหม่ : แนวคิดและการปฏิบัติ. วารสารการวิจัยระบบสาธารณสุข, 3 (2), 68-70.
- อรัญญา มานิตย์. (2540). การจัดบริการสุขภาพตามกรอบกลยุทธ์ส่วนประสมทางการตลาด แผนกผู้ป่วยนอกโรงพยาบาลของรัฐ เขตกรุงเทพมหานคร. วิทยานิพนธ์ปริญญาโทมหาบัณฑิต สาขาการบริหารการพยาบาล คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย.
- อำภา ดีสีปาน. (2539). ความคิดเห็นของผู้ป่วยประกันสังคมต่อระบบบริการแผนกผู้ป่วยนอกโรงพยาบาลเชียงใหม่. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต มหาวิทยาลัยเชียงใหม่.
- อุไร ชำนาญคำ และคณะ. (2540). การศึกษาพฤติกรรมของบุคลากรและความพึงพอใจในบริการของผู้มารับบริการของการนำ คิว. ซี. มาใช้เพื่อพัฒนาคุณภาพบริการสาธารณสุขในโรงพยาบาลโยธธ. สรรพสิทธิสาร, 17 (4), (ตุลาคม - ธันวาคม). อัดสำเนา.

ภาษาอังกฤษ

- Al-Omar BA. (2000). Patients's Expectations, Satisfaction and Future Behavior in Hospitals in Riyadh City [Online]. Available : http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11500730&dopt=Abstrac. (2001, November 7).
- Brian Williams. (1994). Patient Satisfaction : A Valid Concept?. Social Sciences Medicines, 38 (4), 509-516.
- Chang, K. (1997). Dimensions and Indications of Patients' Perceived Nursing Care Quality in the Hospital Setting. Journal of Nursing Care Quality, 11 (8), 26-37.
- Day, F.A. and B. Leoprapai. (1977). Patterns of Health Utilization in Upcountry Thailand. A Report of The Research Project on "The Effect of Location on Family Planning and Health Facility Use. Institute for Population and Social Research Mahidol University.
- Mili-Boussen I., et al. (2000). Patients' Opinions about Day Cataract Surgery in a General Hospital [Online]. Available: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11026840&dopt=Abstrac. (2001, September 22).
- Oberst, M.T. (1984). Patient's Perception of Care : Measurement of Quality and Satisfaction. Cancer. 53 (May, Suppl.), 2366-2375.
- Praradchaya Pasook. (1996). Factors Affecting Patient Satisfaction with Outpatient Pharmacy Service at Chulalongkorn Hospital. Thesis Submitted in Partial Fulfillment of The Requirements for The Degree of Master of Science (PHARMACY) in Faculty of Graduate Studies Mahidol University.
- Scardina, S.A. (1994). SERVQUAL : A Tool of Evaluating Patient Satisfaction with Nursing Care. Journal of Nursing Care Quality, 8 (1), 38-46.
- Sutarga, I. (1998). Satisfaction of In-patients Towards Community Hospital Services in Sena Hospital, Ayutthaya Province Thailand. Master's Thesis, Faculty of Graduate Studies, Mahidol Univesity.
- Suwaporn Naewchampa. (2002). Satisfaction in Health Care Delivery at Sappasitthiprasong Hospital Under the Universal Coverage Scheme. Master's Thesis, Faculty of Graduate Studies, Mahidol University.

- Tagliacozzo, D.L. (1965). *The Nurse from the Patients Point of View. Social Interaction and Patient Care*. Edited by J.K. Skipper & R.C. Leonard. Philadelphia : J.B. Lippincal Company.
- Wensing, M.& Grol, R. and Smits, A. (1994). *Quality Indgements by Patient on General Practice Care : A Literature Analysis. Social Sciences Medicines, 38 (1), 45-53.*
- White JG, Slabber J, Schreuder A. (2001). *Patient Management : Measuring Patients' Expectations and Perceptions of Service Quality Dental Training hospital [Online]. Available : http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11436237&dopt=Abstrac. (2001, Novemver 7).*
- William W. Boyer. (1971). *Policy Making by Government Agencies*. The Nation Administration System New York : John Willy & Sons.
- Wilson, R.N. (1970). *The Sociology of Health : Introduction*. New York : Random House.
- Young GJ, Meterko M, Desai KR. (2000). *Patient Satisfaction with Hospital Care : Effects of Demographic and Institutional Characteristics [Online]. Available : http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11026840&dopt=Abstrac. (2001, September 22).*



รายนามผู้ทรงคุณวุฒิตรวจแบบสอบถาม

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2. ผศ.ดร.ลือชัย ศรีเงินยวง อาจารย์ภาคประจำภาควิชาสังคมศาสตร์
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3. นางกาญจนา เกียรติธนาพันธ์ นักวิชาการสาธารณสุข 7
 กองสำนักงานโครงการปฏิรูประบบบริการสาธารณสุข
 สำนักงานปลัดกระทรวงสาธารณสุข
 กระทรวงสาธารณสุข



แบบสัมภาษณ์**เรื่อง****การประเมินคุณภาพการให้บริการของโรงพยาบาลรัฐที่ดำเนินงานตามนโยบาย
หลักประกันสุขภาพถ้วนหน้า : กรณีศึกษาจังหวัดนนทบุรี**

คำชี้แจง แบบสัมภาษณ์นี้เป็นแบบประเมินคุณภาพให้บริการของผู้ป่วยนอกต่อการบริการของโรงพยาบาลรัฐที่ดำเนินงานตามนโยบายหลักประกันสุขภาพถ้วนหน้า ในจังหวัดนนทบุรี เป็นการสำรวจของนักศึกษาปริญญาโท สาขารัฐประศาสนศาสตร์ คณะสังคมศาสตร์และมนุษยศาสตร์ มหาวิทยาลัยมหิดล ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรศิลปศาสตรมหาบัณฑิต โดยมีจุดมุ่งหมายเพื่อประเมินคุณภาพการให้บริการผู้ป่วยนอกของโรงพยาบาลรัฐที่ดำเนินงานตามนโยบายหลักประกันสุขภาพถ้วนหน้า

แบบสัมภาษณ์ แบ่งออกเป็น 3 ส่วน ดังนี้

ส่วนที่ 1 ข้อมูลทั่วไปของผู้ป่วย ได้แก่ เพศ อายุ การศึกษา รายได้ ประสบการณ์ในการใช้บริการ โรงพยาบาล และลักษณะการเจ็บป่วย มีจำนวนทั้งสิ้น 13 ข้อ

ส่วนที่ 2 แบบบันทึกข้อมูลเกี่ยวกับความคาดหวังต่อคุณภาพบริการ และการบริการที่ผู้ป่วยนอกได้รับ ตลอดจนการประเมินคุณภาพบริการในแผนกผู้ป่วยนอกที่มารับบริการจากโรงพยาบาล มีจำนวนทั้งสิ้น 24 ข้อ

ส่วนที่ 3 ข้อมูลความคิดเห็นต่อการไปใช้บริการในโครงการ 30 บาทรักษาทุกโรค มีจำนวนทั้งสิ้น 4 ข้อ

การตอบแบบสัมภาษณ์ ข้อมูลทุกข้อมีความสำคัญต่อความถูกต้องและความสำเร็จของงานวิจัยนี้เป็นอย่างยิ่ง คำตอบของท่านจะเก็บเป็นความลับ และจะนำไปใช้เพื่อการศึกษาค้นคว้าเท่านั้น ไม่มีผลกระทบต่อท่านด้านการรับบริการแต่อย่างใด ดังนั้น จึงใคร่ขอความร่วมมือ โปรดกรุณาตอบแบบสัมภาษณ์ให้ตรงตามความเป็นจริงมากที่สุด

ขอขอบคุณในความร่วมมืออันดีของท่าน

เอี่ยมเดือน แก้วสว่าง

ผู้วิจัย

แบบสัมภาษณ์ เรื่อง "การประเมินคุณภาพการให้บริการของโรงพยาบาลรัฐที่ดำเนินงานตามนโยบายหลักประกันสุขภาพถ้วนหน้า : กรณีศึกษาจังหวัดนนทบุรี"

เลขที่แบบสัมภาษณ์ _____

วันที่สัมภาษณ์ _____

ชื่อผู้สัมภาษณ์ _____

ส่วนที่ 1 ข้อมูลทั่วไป

คำชี้แจง โปรดเติมคำหรือทำเครื่องหมาย (✓) ลงหน้าข้อความที่เป็นจริงเกี่ยวกับตัวท่าน

1. เพศ

1. ชาย

2. หญิง

2. ปัจจุบันท่านอายุ _____ ปี

3. มีสมาชิกในครอบครัวทั้งสิ้น _____ คน (รวมทั้งตัวท่านด้วย)

4. สมาชิกในครอบครัวมีบัตรทอง _____ คน (รวมทั้งตัวท่านด้วย)

5. ท่านจบการศึกษาสูงสุด

1. ประถมศึกษาหรือต่ำกว่า

2. มัธยมศึกษา

3. ปริญญาตรี

4. สูงกว่าปริญญาตรี

6. อาชีพหลักของท่าน

1. ไม่มีงานทำ

2. พ่อบ้าน/แม่บ้าน

3. ลูกจ้างเอกชน

4. ลูกจ้างภาครัฐ

5. ประกอบธุรกิจส่วนตัว/อาชีพอิสระ/ค้าขาย

6. นักเรียน นักศึกษา

7. รับจ้างทั่วไป/ช่างฝีมือ

8. เกษตรกร

9. อื่น ๆ (โปรดระบุ) _____

7. รายได้ที่ได้จากการประกอบอาชีพ

1. ต่ำกว่า 3,000 บาท/เดือน

2. 3,001 – 6,000 บาท/เดือน

3. 6,001 – 9,000 บาท/เดือน

4. 9,001 – 12,000 บาท/เดือน

5. 12,001 – 15,000 บาท/เดือน

6. 15,001 บาท/เดือน ขึ้นไป

8. ท่านทราบถึงสิทธิประโยชน์จากบัตรทองและเข้าใจวิธีการใช้บริการ (เช่น โดยทั่วไปต้องรับบริการจากโรงพยาบาลที่ระบุในบัตร กรณีฉุกเฉินไปรักษาพยาบาลที่ไหนก็ได้ ฯลฯ)

1. ทราบ

2. ไม่แน่ใจ

3. ไม่ทราบ

9. **สวัสดิการด้านรักษาพยาบาลที่ท่านมีอยู่เดิม** (ก่อน ได้รับบัตรทอง)

1. สวัสดิการข้าราชการ/รัฐวิสาหกิจ
2. ประกันสังคม
3. บัตร สปร.
4. ไม่มี (จ่ายค่ารักษาพยาบาลเอง)
5. อื่น ๆ (โปรดระบุ) _____

10. **โรงพยาบาลที่ระบุตามบัตรทองของท่านคือ**โรงพยาบาล _____

11. **โรงพยาบาลที่ท่านมักไปรับการรักษาเป็นประจำเมื่อเจ็บป่วย** เป็นโรงพยาบาลเดียวกันกับที่ระบุในบัตรทองหรือไม่

1. ใช่
2. ไม่ใช่ (โปรดระบุโรงพยาบาลที่รักษาเป็นประจำ) _____
3. ไม่เคยเจ็บป่วย

12. **ก่อนที่มีบัตรทอง ท่านเคยมาใช้บริการโรงพยาบาลแห่งนี้หรือไม่**

1. ไม่เคย (มาครั้งนี้เป็นครั้งแรก) (ข้ามไปข้อ 13)
2. เคย

12.1 **ท่านคิดว่าบริการที่ท่านได้รับจากโรงพยาบาลแห่งนี้เปลี่ยนแปลงไปหรือไม่**

1. เปลี่ยนแปลงดีขึ้น
2. เปลี่ยนแปลงแย่ลง
3. ไม่เปลี่ยนแปลง (เหมือนเดิม)

13. **ท่านป่วยเป็นโรคอะไร** จึงมาใช้บริการโรงพยาบาลในครั้งนี้
 ระบุอาการหรือโรคที่แพทย์วินิจฉัย _____

ส่วนที่ 2 ความคาดหวังคุณภาพบริการของผู้ป่วยนอก และคุณภาพบริการที่ได้รับจริง ตลอดจนการประเมินคุณภาพบริการโดยผู้ป่วย

คำชี้แจง พิจารณาข้อความต่อไปนี้ว่า ท่านคาดหวังกับบริการของโรงพยาบาลตามหัวข้อต่อไปนี้
อย่างไร ตลอดจนบริการที่ได้รับจริงเป็นเช่นไร และประเมินจากประสบการณ์ของท่าน
ท่านว่าบริการนั้นๆ อยู่ในระดับใด ตามความคิดเห็นของท่าน

เกณฑ์ในการให้คะแนน

ความคาดหวังกับบริการ :

- 3 = คาดหวังมาก
- 2 = คาดหวังปานกลาง
- 1 = คาดหวังน้อย
- 0 = ไม่คาดหวัง

บริการที่ได้รับจริง :

- 3 = สมหวังมาก
- 2 = สมหวังปานกลาง
- 1 = สมหวังน้อย
- 0 = ไม่สมหวัง

การประเมินคุณภาพบริการ :

- 5 = ดีมากเห็นด้วยอย่างยิ่ง
- 4 = ดีเห็นด้วย
- 3 = พอใช้เห็นด้วยปานกลาง
- 2 = ไม่ค่อยดี/ไม่เห็นด้วย

| ข้อความ | ความคาดหวังกับบริการ | | | | บริการที่ได้รับจริง | | | | การประเมินคุณภาพบริการ | | | | |
|--|----------------------|---|---|---|---------------------|---|---|---|------------------------|---|---|---|---|
| | 3 | 2 | 1 | 0 | 3 | 2 | 1 | 0 | 5 | 4 | 3 | 2 | 1 |
| 1. มีโปรแกรมคิดแนะนำการใช้บัตรทอง | | | | | | | | | | | | | |
| 2. มีประชาสัมพันธ์ให้สอบถามให้การต้อนรับ และคอยช่วยอำนวยความสะดวก | | | | | | | | | | | | | |
| 3. เจ้าหน้าที่อื่นๆ ในโรงพยาบาลที่ให้บริการแก่ผู้ใช้บัตรทอง มีจำนวนเพียงพอ | | | | | | | | | | | | | |
| 4. มีแพทย์และพยาบาลให้บริการตรวจโรค ดูแลและเอาใจใส่ผู้ใช้บัตรทองเพียงพอ | | | | | | | | | | | | | |
| 5. เครื่องมือที่ใช้ในการรักษาพยาบาลสะอาดและทันสมัย | | | | | | | | | | | | | |
| 6. โรงพยาบาลมีเครื่องมือในการรักษาพยาบาลเพียงพอ และพร้อมใช้อย่างทันที่ | | | | | | | | | | | | | |
| 7. สถานที่ให้บริการไม่แออัดเกินไป อากาศถ่ายเทได้สะดวก | | | | | | | | | | | | | |
| 8. จัดที่นั่งพักของผู้ป่วยและญาติเป็นระเบียบ เพียงพอและสะดวกสบาย | | | | | | | | | | | | | |
| 9. เมื่อท่านไปขอรับบริการ เจ้าหน้าที่ให้บริการอย่างรวดเร็ว | | | | | | | | | | | | | |
| 10. การรับบริการตรวจรักษาด้วยบัตรทอง มีขั้นตอนไม่มาก | | | | | | | | | | | | | |

| ข้อคำถาม | ความสอดคล้องกับบริการ | | | | บริการที่ได้รับจริง | | | | การประเมินคุณภาพบริการ | | | | |
|---|-----------------------|---|---|---|---------------------|---|---|---|------------------------|---|---|---|---|
| | 3 | 2 | 1 | 0 | 3 | 2 | 1 | 0 | 5 | 4 | 3 | 2 | 1 |
| 11. ได้รับคำแนะนำและวิธีการปฏิบัติตัวที่เหมาะสมกับโรคอย่างละเอียด ตรงประเด็น ด้วยภาษาที่เข้าใจง่าย จนสามารถปฏิบัติได้ | | | | | | | | | | | | | |
| 12. เจ้าหน้าที่แจ้งให้ท่านได้ทราบถึงความจำเป็น วิธีการ และผลข้างเคียงที่จะเกิดขึ้นก่อนการรักษาพยาบาล | | | | | | | | | | | | | |
| 13. เจ้าหน้าที่ให้การต้อนรับด้วยท่าทีที่เป็นมิตร และมีกิริยามารยาทสุภาพพูดจาไพเราะ | | | | | | | | | | | | | |
| 14. เมื่อใช้บัตรทองรักษาพยาบาล เจ้าหน้าที่แสดงความเต็มใจ กระตือรือร้นในการให้บริการกับท่าน | | | | | | | | | | | | | |
| 15. เจ้าหน้าที่ให้การรักษาพยาบาลท่านด้วยมาตรฐานเดียวกันกับผู้ป่วยรายอื่น | | | | | | | | | | | | | |
| 16. การรักษาพยาบาลเป็นไปตามลำดับของผู้มารับบริการ | | | | | | | | | | | | | |
| 17. แพทย์บอกถึงสาเหตุ อาการ และวิธีการรักษาให้ท่านทราบ จนท่านเข้าใจดี (โดยท่านยังไม่ได้ซักถามอะไรเลย) | | | | | | | | | | | | | |
| 18. ท่านรู้สึกเชื่อมั่นในความสามารถของแพทย์ที่สามารถรักษาโรคของท่านให้หายได้ | | | | | | | | | | | | | |
| 19. การเจ็บป่วยครั้งต่อไป ท่านจะใช้บริการ 30 บาทรักษาทุกโรคอีก | | | | | | | | | | | | | |
| 20. เมื่อท่านเจ็บป่วย จะนึกถึงการใช้บริการ 30 บาทรักษาทุกโรค เป็นอันดับแรก | | | | | | | | | | | | | |
| 21. เมื่อท่านมีโอกาสนจะช่วยแนะนำและประชาสัมพันธ์ให้เพื่อนบ้านมาใช้บริการ 30 บาทรักษาทุกโรค | | | | | | | | | | | | | |
| 22. เมื่อญาติหรือบุคคลภายในครอบครัวเจ็บป่วย ท่านจะแนะนำให้มาใช้บริการ 30 บาทรักษาทุกโรค | | | | | | | | | | | | | |
| 23. ถ้ามีโอกาสเลือก ท่านจะเลือกโรงพยาบาลแห่งนี้เป็นอันดับแรก | | | | | | | | | | | | | |
| 24. ท่านพึงพอใจกับคุณภาพบริการ โดยรวมทุกด้าน | | | | | | | | | | | | | |

ส่วนที่ 3 ข้อมูลความคิดเห็นต่อการไปใช้บริการในโครงการ 30 บาท รักษาทุกโรค

คำชี้แจง กรุณาใส่เครื่องหมาย (✓) ลงในช่องว่างตามความคิดเห็นของท่านในการใช้บริการครั้งนี้

1. ท่านคิดว่าท่านพบปัญหาจากการมารับบริการในครั้งนี้หรือไม่?

1. ไม่มี (ข้ามไปข้อ 3)

2. มี (โปรดเรียงลำดับตามความรุนแรงของปัญหา ตามความคิดเห็นของท่านมาเพียง 3 ข้อ)

- | | |
|---|-------------------------------------|
| _____ คุณภาพของยา | _____ บริการหรือท่าทีของเจ้าหน้าที่ |
| _____ ความพอเพียงของบุคลากร | _____ ความสะอาดสบายของโรงพยาบาล |
| _____ ความสามารถในการรักษา | _____ ระยะเวลาในการรอรับการบริการ |
| _____ ค่าใช้จ่ายอื่นๆ (ค่าเดินทาง+ ค่าหยุดงาน+ ค่าใช้จ่ายอื่นๆ) | |
| _____ อื่น ๆ (โปรดระบุ) _____ | |

2. จากปัญหาดังกล่าวข้างต้น ท่านคิดว่าควรแก้ไขปัญหาคำคัญที่สุดของท่านอย่างไร

3. ท่านคิดว่าค่าใช้จ่ายที่ท่านต้องเสียไปในการรักษาพยาบาลจำนวนเงิน 30 บาท คู้มค่ากับบริการที่ได้รับหรือไม่

1. ถูกเกินไป
2. คู้มค่ากับเงินที่จ่ายไป
3. แพงเกินไป

4. ถ้าหากรัฐบาลมีนโยบายในการเรียกเก็บเงินค่ารักษาพยาบาลมากกว่า 30 บาท เพื่อปรับปรุงในการบริการ ท่านยินดีจะจ่ายเงินเพิ่มเติมหรือไม่

1. ยินดี เพราะ _____

ท่านคิดว่าสามารถเสียค่าใช้จ่ายในการรักษาพยาบาลสูงสุดเป็นจำนวนเงิน _____ บาท/ครั้ง

2 ไม่ยินดี เพราะ _____

ขอขอบพระคุณอย่างสูง
เอี่ยมเดือน แก้วสว่าง



ตาราง ผ.1 จำนวนและร้อยละของจำนวนสมาชิกในครอบครัว

| จำนวนสมาชิกในครอบครัว | จำนวน(คน) | ร้อยละ |
|-----------------------|------------|--------------|
| 1-3 คน | 100 | 25.0 |
| 4 คน | 106 | 26.5 |
| 5 คนขึ้นไป | 194 | 48.5 |
| รวม | 400 | 100.0 |

ตาราง ผ.2 จำนวนและร้อยละของจำนวนสมาชิกในครอบครัวที่มีบัตรทอง

| จำนวนสมาชิกในครอบครัวที่มีบัตรทอง | จำนวน(คน) | ร้อยละ |
|-----------------------------------|------------|--------------|
| 1-3 คน | 194 | 48.5 |
| 4 คน | 97 | 24.3 |
| 5 คนขึ้นไป | 109 | 27.3 |
| รวม | 400 | 100.0 |

ตาราง ผ.3 จำนวนและร้อยละของอาชีพหลัก

| อาชีพหลัก | จำนวน(คน) | ร้อยละ |
|---------------------------------------|------------|--------------|
| พ่อบ้าน/แม่บ้าน | 104 | 26.7 |
| ประกอบธุรกิจส่วนตัว/อาชีพอิสระ/ค้าขาย | 71 | 18.2 |
| รับจ้างทั่วไป/ช่างฝีมือ | 63 | 16.2 |
| ไม่มีงานทำ | 61 | 15.6 |
| นักเรียน นักศึกษา | 44 | 11.3 |
| ถูกจ้างเอกชน | 27 | 6.9 |
| เกษตรกร | 14 | 3.6 |
| ถูกจ้างภาครัฐ | 6 | 1.5 |
| รวม | 390 | 100.0 |

ตาราง ผ.4 จำนวนและร้อยละของความเข้าใจสิทธิประโยชน์และการใช้บัตรทอง

| ความเข้าใจสิทธิประโยชน์และการใช้บัตรทอง | จำนวน(คน) | ร้อยละ |
|---|------------|--------------|
| ทราบ | 221 | 55.3 |
| ไม่แน่ใจ | 109 | 27.3 |
| ไม่ทราบ | 70 | 17.5 |
| รวม | 400 | 100.0 |

ตาราง ผ.5 จำนวนและร้อยละของสวัสดิการด้านการรักษาพยาบาลที่มีอยู่ก่อนได้รับบัตรทอง

| สวัสดิการด้านการรักษาพยาบาลที่มีอยู่ก่อนได้รับบัตรทอง | จำนวน(คน) | ร้อยละ |
|---|------------|--------------|
| ไม่มี (จ่ายค่ารักษาพยาบาลเอง | 248 | 62.0 |
| ประกันสังคม | 48 | 12.0 |
| บัตรประกันสุขภาพ 500 บาท/ปี | 44 | 11.0 |
| บัตร สปร. | 25 | 6.3 |
| สวัสดิการข้าราชการ/รัฐวิสาหกิจ | 22 | 5.5 |
| อื่นๆ | 13 | 3.3 |
| รวม | 400 | 100.0 |

ตาราง ผ.6 จำนวนและร้อยละของโรงพยาบาลที่ระบุตามบัตรทองของผู้ป่วย

| โรงพยาบาลที่ระบุตามบัตรทองของผู้ป่วย | จำนวน(คน) | ร้อยละ |
|--------------------------------------|------------|--------------|
| โรงพยาบาลพระนั่งเกล้า | 139 | 34.9 |
| โรงพยาบาลชลประทาน | 95 | 23.9 |
| โรงพยาบาลบางบัวทอง | 41 | 10.3 |
| โรงพยาบาลปากเกร็ด | 41 | 10.3 |
| โรงพยาบาลบางกรวย | 28 | 7.0 |
| โรงพยาบาลไทรน้อย | 28 | 7.0 |
| โรงพยาบาลบางใหญ่ | 26 | 6.5 |
| รวม | 398 | 100.0 |

ตาราง ผ.7 จำนวนและร้อยละของโรงพยาบาลที่ระบุในบัตรทองเป็นโรงพยาบาลที่นิยมไปรักษาเป็นประจำเมื่อเจ็บป่วย

| โรงพยาบาลที่ระบุในบัตรทองเป็นโรงพยาบาลที่นิยมไปรักษาเป็นประจำเมื่อเจ็บป่วย | จำนวน(คน) | ร้อยละ |
|--|------------|--------------|
| ใช่ | 237 | 59.3 |
| ไม่ใช่ | 144 | 36.0 |
| ไม่เคยเจ็บป่วย | 19 | 4.8 |
| รวม | 400 | 100.0 |

ตาราง ผ.8 จำนวนและร้อยละของโรงพยาบาลที่มักไปรักษาเป็นประจำเมื่อเจ็บป่วย

| โรงพยาบาลที่มักไปรักษาเป็นประจำเมื่อเจ็บป่วย | จำนวน(คน) | ร้อยละ |
|--|------------|--------------|
| โรงพยาบาลรัฐสังกัดกระทรวงสาธารณสุข | 57 | 42.2 |
| โรงพยาบาลเอกชน | 51 | 37.8 |
| โรงพยาบาลรัฐนอกกระทรวงสาธารณสุข | 17 | 12.6 |
| โรงพยาบาลรัฐสังกัดมหาวิทยาลัย | 10 | 7.4 |
| รวม | 135 | 100.0 |

ตาราง ผ.9 จำนวนและร้อยละของก่อนที่มีบัตรทองเคยมาใช้บริการที่โรงพยาบาลที่ระบุตามบัตร

| ก่อนที่มีบัตรทอง เคยมาใช้บริการที่โรงพยาบาลที่ระบุตามบัตร | จำนวน(คน) | ร้อยละ |
|---|------------|--------------|
| ไม่เคย | 128 | 32.0 |
| เคย | 272 | 68.0 |
| รวม | 400 | 100.0 |

ตาราง ผ.10 จำนวนและร้อยละของการเปลี่ยนแปลงของโรงพยาบาลหลังเข้าร่วมโครงการ 30 บาท รักษาทุกโรค

| การเปลี่ยนแปลงของโรงพยาบาลหลังเข้าร่วมโครงการ 30 บาทรักษาทุกโรค | จำนวน(คน) | ร้อยละ |
|---|-----------|--------|
| เปลี่ยนแปลงดีขึ้น | 145 | 53.3 |
| ไม่เปลี่ยนแปลง (เหมือนเดิม) | 114 | 41.9 |
| เปลี่ยนแปลงแย่ลง | 13 | 4.8 |
| รวม | 272 | 100.0 |

ตาราง ผ.11 จำนวนและร้อยละของปัญหาจากการมารับบริการ

| ปัญหาจากการมารับบริการ | จำนวน(คน) | ร้อยละ |
|------------------------|-----------|--------|
| ไม่มี | 256 | 64.0 |
| มี | 144 | 36.0 |
| รวม | 400 | 100.0 |

ตาราง ผ.12 จำนวนและร้อยละของความรุนแรงของปัญหาจากการมารับบริการ

| ความรุนแรงของปัญหาในลำดับแรก | จำนวน(คน) | ร้อยละ |
|---|-----------|--------|
| ระยะเวลาในการรอคอย | 44 | 30.6 |
| ความเพียงพอของบุคลากร | 29 | 20.1 |
| บริการหรือท่าทีของเจ้าหน้าที่ | 25 | 17.4 |
| คุณภาพของยา | 24 | 16.7 |
| ความสามารถในการรักษา | 10 | 6.9 |
| ความสะดวกของโรงพยาบาล | 6 | 4.2 |
| ค่าใช้จ่ายอื่น ๆ (ค่าเดินทาง + ค่าหยุดงาน + ค่าใช้จ่ายอื่น ๆ) | 6 | 4.2 |
| รวม | 144 | 100.0 |

ตาราง ผ.13 จำนวนและร้อยละของการแก้ไขปัญหาการมารับบริการที่สำคัญที่สุด

| การแก้ไขปัญหาการมารับบริการที่สำคัญที่สุด | จำนวน(คน) | ร้อยละ |
|---|-----------|--------|
| การดำเนินการรักษาพยาบาลในแต่ละจุดให้รวดเร็วยิ่งขึ้น และจัดระเบียบการทำงานให้เรียบร้อย | 39 | 29.3 |
| เพิ่มจำนวนบุคลากรให้เพียงพอ โดยเฉพาะแพทย์เฉพาะทาง | 32 | 24.1 |
| อบรมเจ้าหน้าที่ให้พุดจาสุภาพและเต็มใจให้บริการ | 25 | 18.8 |
| ปรับปรุงคุณภาพของยาให้มีมาตรฐานเทียบเท่ากับผู้ป่วยที่ชำระเงินเอง | 19 | 14.3 |
| แพทย์วินิจฉัยโรคให้ละเอียด | 8 | 6.0 |
| อาคารสถานที่ และความสะดวกสบายในโรงพยาบาลให้มีมากขึ้น | 6 | 4.5 |
| สามารถเลือกโรงพยาบาลที่สะดวกใกล้บ้านและให้มีการรักษานอกเวลา | 4 | 3.0 |
| รวม | 133 | 100.0 |

ตาราง ผ.14 จำนวนและร้อยละของความคุ้มค่าของจำนวนเงิน 30 บาทกับการบริการที่ได้รับ

| ความคุ้มค่าของจำนวนเงิน 30 บาทกับการบริการที่ได้รับ | จำนวน(คน) | ร้อยละ |
|---|-----------|--------|
| คุ้มค่ากับเงินที่จ่ายไป | 310 | 77.7 |
| ถูกเกินไป | 88 | 22.1 |
| แพงเกินไป | 1 | 0.3 |
| รวม | 399 | 100.0 |

ตาราง ผ.15 จำนวนและร้อยละของความพร้อมในการจ่ายค่ารักษาพยาบาลเพิ่มเติมมากกว่า 30 บาท เพื่อปรับปรุงการบริการ

| ความพร้อมในการจ่ายค่ารักษาพยาบาลเพิ่มเติม มากกว่า 30 บาท เพื่อปรับปรุงการบริการ | จำนวน(คน) | ร้อยละ |
|--|-----------|--------|
| ยินดี | 319 | 80.6 |
| ไม่ยินดี | 77 | 19.4 |
| รวม | 396 | 100.0 |

ตาราง ผ.16 จำนวนและร้อยละของเหตุผลในการยินดีจ่ายค่ารักษาพยาบาล

| เหตุผลในการยินดีจ่ายค่ารักษาพยาบาล | จำนวน(คน) | ร้อยละ |
|--|-----------|--------|
| ยินดีเพราะ | | |
| เพื่อให้การบริการสะดวกสบายและดียิ่งขึ้น | 111 | 31.1 |
| 30 บาทที่จ่ายราคาถูกเกินไป และยังได้พบแพทย์ด้วย | 71 | 19.9 |
| เพื่อให้การรักษาพยาบาลมีมาตรฐานมากขึ้นทุก ๆ ด้าน | 47 | 13.2 |
| ช่วยแบ่งเบาภาระของรัฐและโรงพยาบาล | 44 | 12.3 |
| ทำตามนโยบายรัฐ หากรัฐเรียกเก็บเงินก็ยินดีจ่าย | 18 | 5.0 |
| รวม | 291 | 81.5 |

ตาราง ผ.17 จำนวนและร้อยละของเหตุผลในการไม่ยินดีจ่ายค่ารักษาพยาบาล

| เหตุผลในการไม่ยินดีจ่ายค่ารักษาพยาบาล | จำนวน(คน) | ร้อยละ |
|---|-----------|-------------|
| ไม่ยินดีเพราะ | | |
| ราคาเหมาะสมและคุ้มค่าดีแล้ว | 25 | 7.0 |
| รายได้น้อย/ไม่มีรายได้/ไม่มีเงิน | 31 | 8.7 |
| รัฐควรดูแลประชาชนในด้านการรักษาพยาบาลโดยไม่เสียค่าใช้จ่าย | 4 | 1.1 |
| อยากให้กลับไปเป็นบัตรประกันสุขภาพ 500 บาท/ปี เหมือนเดิม | 3 | 0.8 |
| การรักษาพยาบาลยังมีได้เต็มที่และเต็มรูปแบบมากนัก | 3 | 0.8 |
| รวม | 66 | 18.4 |

ตาราง ผ.18 จำนวนและร้อยละของจำนวนเงินที่สามารถเสียค่ารักษาพยาบาลได้สูงสุด (บาท/ครั้ง)

| จำนวนเงินที่สามารถเสียค่ารักษาพยาบาลได้สูงสุด (บาท/ครั้ง) | จำนวน(คน) | ร้อยละ |
|---|------------|--------------|
| 35-50 บาท | 116 | 36.5 |
| 51-100 บาท | 169 | 53.1 |
| 101-500 บาท | 33 | 10.4 |
| รวม | 318 | 100.0 |

BIOGRAPHY

| | |
|------------------------------|---|
| NAME | Miss Auemduen Kaewsawang |
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