ACCIDENT AND EMERGENCY SERVICE SYSTEM FOR THE PATIENTS UTILIZING SERVICES OUTSIDE THE REGISTERED PROVINCES UNDER THE UNIVERSAL COVERAGE SCHEME: CURRENT SITUATION, PROBLEMS, AND RECOMMENDATIONS FROM PROVIDER PERSPECTIVES

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ABSTRACT

The objective of this qualitative research was to analyze the system for patients utilizing accident and emergency (AE) services outside the registered provinces under the Universal Coverage Scheme (UCS) from provider perspectives. Data were obtained from document review, and interviews with the following groups: 1) provincial health administrators 2) hospital administrators 3) officers responsible for the UCS and 4) AE service staff (doctors, nurses and other related officers). The data collection was performed from March to September, 2005.

The results revealed that the administrative structure in all provinces comprised 3 provincial subcommittees which had different operation in each province. Two provinces had deducted some money to pay for AE within the registered province. Two provinces had determined their own criteria for considering emergency illness in the provincial level. Every hospital had established a health insurance division for protecting patient's rights. They used the AE criteria specified by the National Health Security Office (NHSO). However, in practice, some hospitals followed the guideline strictly while some were more relaxed depending on the policy and discretion of doctors in each hospital. Most providers had accurate knowledge and understanding about the regulations and conditions for utilizing AE services of the patients under the UCS while some providers did not know or misunderstood some details on benefits and conditions for utilizing such services. There were several factors that caused differences in data submission for reimbursement in cases of AE particularly migration of people without changing their registration. Many practical problems in providing service for AE patients were identified.

According to the study, there are several recommendations as follow: The NHSO should clearly define emergency. The twice a year frequency limit of using emergency services outside the registered province should be reviewed. The reimbursement rate for AE should be adjusted. An up-to-date and reliable database system and program for requesting claim codes should be developed. Finally, there should be easily accessible information for people regarding their own rights and roles in receiving service, especially conditions and exceptions in utilizing services in the case of AE.

KEY WORDS: ACCIDENT AND EMERGENCY / UNIVERSAL COVERAGE SCHEME / THIRTY BAHT SCHEME / HEALTH SERVICE SYSTEM

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ระบบบริการผู้ป่วยอุบัติเหตุและเจ็บป่วยฉุกเฉินต่างกองทุนสาขาในระบบประกันสุขภาพถ้วนหน้า: สถานการณ์ปัจจุบัน, ปัญหา, และข้อเสนอแนะจากมุมมองของผู้ให้บริการ
(ACCIDENT AND EMERGENCY SERVICE SYSTEM FOR THE PATIENTS UTILIZING SERVICES OUTSIDE THE REGISTERED PROVINCES UNDER THE UNIVERSAL COVERAGE SCHEME: CURRENT SITUATION, PROBLEMS, AND RECOMMENDATIONS FROM PROVIDER PERSPECTIVES)

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บทคัดย่อ

การวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาระบบบริการผู้ป่วยอุบัติเหตุและเจ็บป่วยฉุกเฉินต่างกองทุนสาขาในระบบประกันสุขภาพถ้วนหน้าจากมุมมองของผู้ให้บริการ โดยใช้วิธีวิจัยเชิงคุณภาพ เก็บรวบรวมข้อมูลจากเอกสารรายงานและการสัมภาษณ์ผู้บริหารระดับจังหวัด ผู้บริหารโรงพยาบาล หัวหน้าฝ่ายหรือผู้ที่รับผิดชอบงานประกันสุขภาพของจังหวัดและโรงพยาบาล และกลุ่มผู้ให้บริการผู้ป่วยอุบัติเหตุเจ็บป่วยฉุกเฉิน โดยเก็บข้อมูลระหว่างเดือนมีนาคม-กันยายน 2548

ผลการวิจัยพบว่า ทุกจังหวัดจัดโครงสร้างการบริหารระบบหลักประกันสุขภาพโดยมีคณะอนุกรรมการระดับจังหวัด 3 คณะ แต่ละจังหวัดมีผลการดำเนินงานมากน้อยแตกต่างกัน โดย 2 จังหวัดมีการกันเงินไว้ที่จังหวัดเพื่อตามจ่ายกรณีอุบัติเหตุเจ็บป่วยฉุกเฉินภายในจังหวัด และ 2 จังหวัดมีการกำหนดหลักเกณฑ์การพิจารณาเจ็บป่วยฉุกเฉินของจังหวัดขึ้นเอง ทุกโรงพยาบาลมีการตั้งศูนย์ประกันสุขภาพเพื่อคุ้มครองและพิทักษ์สิทธิให้กับผู้ป่วย โรงพยาบาลส่วนใหญ่จะพิจารณาอุบัติเหตุเจ็บป่วยฉุกเฉินตามแนวทางที่สำนักงานหลักประกันสุขภาพแห่งชาติ (สปสช.) กำหนด แต่ในทางปฏิบัติแต่ละแห่งมีความเคร่งครัดในการปฏิบัติตามหลักเกณฑ์ไม่เท่ากันขึ้นอยู่กับนโยบายและการตัดสินใจของแพทย์ผู้ให้การรักษา ผู้ให้บริการส่วนใหญ่มีความเข้าใจที่ถูกต้องเกี่ยวกับการใช้สิทธิในกรณีอุบัติเหตุเจ็บป่วยฉุกเฉิน ส่วนน้อยที่ไม่ทราบหรือเข้าใจผิดเกี่ยวกับรายละเอียดของสิทธิและเงื่อนไขการใช้สิทธิ ความแตกต่างของการส่งเบิกชดเชยกรณีอุบัติเหตุเจ็บป่วยฉุกเฉินในแต่ละพื้นที่มีสาเหตุมาจากหลายปัจจัยโดยเฉพาะการเคลื่อนย้ายของประชากรโดยไม่ได้เปลี่ยนย้ายสถานพยาบาลใหม่ นอกจากนี้การให้บริการผู้ป่วยอุบัติเหตุเจ็บป่วยฉุกเฉินยังพบปัญหาอุปสรรคในทางปฏิบัติหลายอย่าง

จากผลการวิจัย มีข้อเสนอแนะว่า สปสช.ควรกำหนดคำจำกัดความของการเจ็บป่วยฉุกเฉินให้ชัดเจนยิ่งขึ้น พิจารณายกเลิกเงื่อนไขการใช้สิทธิกรณีเจ็บป่วยฉุกเฉินนอกจังหวัดได้ไม่เกินปีละ 2 ครั้ง พิจารณาปรับอัตราการจ่ายเงินชดเชยกรณีอุบัติเหตุเจ็บป่วยฉุกเฉินนอกจังหวัด ปรับปรุงโปรแกรมการขอ claim code รวมทั้งควรมีการประชาสัมพันธ์ให้ประชาชนทราบถึงสิทธิและหน้าที่ของตนเองในการรับบริการกรณีอุบัติเหตุเจ็บป่วยฉุกเฉินโดยเฉพาะเงื่อนไขและข้อยกเว้นต่างๆในการใช้สิทธินี้

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LIST OF ABBREVIATIONS

AE	Accident and emergency
CHI	Central Office for Health Care Information
CSMBS	Civil Servant Medical Benefit Scheme
CUP	Contracted unit for primary care
DRG	Diagnosis Related Group
FY	Fiscal year
GC	Gold card
ICD-10	International Statistical Classification of Diseases and related Health Problem
MoPH	Ministry of Public Health
NHSO	National Health Security Office
RW	Relative weight
PCU	Primary care unit
PHO	Provincial Health Office
PP	Health promotion and disease prevention
SSS	Social Security Scheme
TAI	Traffic Accident Insurance
UC	Universal coverage of health care
UCS	Universal Coverage Scheme

CHAPTER I
INTRODUCTION

1.1 Background and significance of the problem

Accident and emergency (AE) care for beneficiaries under the Universal Coverage Scheme (UCS) are specific services. Normally beneficiaries of the UCS have to utilize services at their registered health facilities except in cases of AE. According to section 5 of the National Health Security Act B.E. 2545, states that for AE illnesses, the UC beneficiaries can go for medical care at any health facilities located nearest to the scene, which are the government health services or the private sector health services enrolled with this scheme. Health providers which provide services for these AE cases, and are located outside the provinces where the beneficiaries register, can reimburse cost of treatment directly from the NHSO. This special payment method is designed to fit with the normal life style of people, which traveling is common events, and then can protect their access to care. There is no limitation on frequency of hospital visit for accident injury and not more than two times per year for emergency illness (National Health Security Office, 2004).

Besides the specific services of AE care, utilization behavior and expectation of AE patients are also different from those of general patients. Service utilization behavior of patients including the illness assessment process and decision making process for choosing their service providers not only depend on several factors such as patient's knowledge and understanding about rights, service system, perceived severity of illness, convenience, service accessibility, reliability in health facilities, influence of other person, referral system, etc, but also depend on self-assessment of patients. However, self-assessment of patients whether their symptoms as emergency illness which allow them to use services at any health facilities, may cause confusion due to the definition of "emergency" as indicated in criteria set by the NHSO is widely and difficult to assess by themselves. At present, emergency illness is mostly defined by health care professional. Thus, it has been found the difference between self-

assessment by patients and criteria defined by health care providers. However, guideline for defining emergency illness in provider perspectives is an interesting issue for study. This would directly affect to the claim reimbursement of medical expenses from the NHSO.

Inappropriate behavior in AE service utilization of the patients, utilizing AE services for common illness that require non-urgent treatment and utilizing services outside the registered provinces, may cause loss of resources as unnecessary and moral hazard from both patients and providers. Due to the reimbursement guideline for AE services between inside and outside the provinces where the beneficiaries register are different. If AE illness occur within the provinces where the beneficiaries register, medical expenses incurred would be reimbursed by the provincial fund, whereas AE illness occur outside the province where the beneficiaries register, medical expenses incurred would be reimbursed by the NHSO. According to evidence from the scheme, moral hazard or over utilization is not clear. It has been found that a number of patients are still faced with the problems of accessibility to emergency services. There is a tendency for registered hospitals to push their beneficiaries who are treatable by themselves to other hospitals located in different provinces. For example, the complaints of AE patients that the registered hospitals refuse to provide care and advise them to treat in other hospitals in order to avoid the medical expenditure within the first 72 hours. On the other hand, it has been found that some hospitals provide over treatment for patients utilizing services outside the registered provinces.

A previous study by Pongpisut Jongudomsuk and Sarai Ruengdej (2004: 238) showed that during October 2001 to September 2003, a total of 274,976 cases was reimbursed from the NHSO for AE services. Approximately 24.8 million bath were paid for 62,899 outpatient cases (from 1,038 hospitals), while approximately 2,268 million baht were paid for 212,077 inpatient cases (from 987 hospitals). Average reimbursement rate was 413.82 baht per visit for outpatient and 7,929.16 baht per admission for inpatient. Almost half of cases were submitted from health facilities in Bangkok and the central region. The researchers explained that the over supply of health care providers in Bangkok and the central region, and the migration of people to these areas without changing their registrations were the two major reasons of the

higher claims from these areas. They commented that payment for inpatient which was limited only for the cost of treatment during the first 72 hours, then registered providers had to be responsible for the cost of treatment after 72 hours. This could create unnecessary transfer patients between health facilities if registered providers are not willing to pay the cost of treatment after 72 hours. They further recommended that flexible registration system, which allows people to register health facilities close to their houses or workplaces, and more effective provider payment method for AE cases, which cost of treatment should be totally paid by the NHSO instead of paying partly by registered providers, could improve the system and promote access to care of UC beneficiaries. However, provider payment for AE care which is limited only for the first 72 hours expenses was abolished in fiscal year 2004 (National Health Security Office, 2004) in order to reduce concern from providers and protect access to care of UC beneficiaries. At present, NHSO is responsible for the full payment of AE care instead of paying only the first 72 hours incurred costs.

As mentioned above, inappropriate behavior in the use of AE services and utilizing services outside the registered provinces may cause moral hazard and loss of resources as unnecessary. In addition, from literature review, there were some studies conducted by several academic institution related to knowledge, understanding, opinion, attitude, acceptance, and satisfaction on the UCS among patients and health care providers. There was only one study conducted by Pongpisut Jongudomsuk, et al (2004) related to AE cases in the UCS. Although this study provided useful information for improvement system, it was analyzed from secondary data by using quantitative method and not all issues may have been covered in detail. It did not provide information about management system for AE services, understanding and attitude toward the AE service system, guidelines for considering emergency illness, process of providing services for AE patients, and problems of providing services to AE patients from provider perspectives. Moreover, after changing provider payment method for AE care, problem of moral hazard and access to care remain the major concerns and also need further improvements. Therefore, it was necessary to further study on this topic by using qualitative method in order to obtain more details of AE service system under the UCS. The results from this study would be used as the basic information for improvement of AE service system that support the providers and

correspond to the real needs of the patients. This would eventually result in patient satisfaction in AE services provided by health care providers and lead to the efficient use of resources in the future.

1.2 Objectives of the study

The objectives of this study were as follows:

1. To study the management system for accident and emergency services under the Universal Coverage Scheme in each hospital / province
2. To explore the understanding and opinion of administrators and health care providers toward the accident and emergency service system under the Universal Coverage Scheme
3. To examine the definitions of accident and emergency defined by health care providers
4. To study the process of providing services for accident and emergency patients utilizing services outside the registered provinces under the Universal Coverage Scheme
5. To find the causes of the high or low reimbursement for accident and emergency services in each hospital
6. To identify the problems of providing services to accident and emergency patients and propose recommendations for improvement accident and emergency service system under the Universal Coverage Scheme

1.3 Scope of the study

This study would scope on the service system for the patients utilizing AE services outside the registered provinces under the UCS. It was conducted only from the view of the health administrators who responsible for the UCS and health care providers who directly provided services for the AE patients under this scheme. The data for this study was collected at 17 public hospitals (6 regional/general hospitals and 11 community hospitals) under the MoPH in six provinces: Chonburi, Khonkaen, Nakhonratchasima, Mukdahan, Phatthalung, and Samutprakan.

1.4 Expected outcome and benefits

This study could provide the information about AE service system for patients utilizing services outside the registered provinces under the UCS. It could be used as the basic information for improvement of AE service system that support the providers and correspond to the real needs of the patients. This would eventually result in patient satisfaction in AE services provided by health care providers and lead to the efficient use of resources in the future.

1.5 Operational definitions

Accident or emergency patient refers to UC patient who is ill from the following causes:

1) All accidents from road traffics, working, being harmed or hurt, poisoning, or unknown causes

2) Emergency such as emergent physical and mental sickness, for example sickness from surgery, orthopedic surgery, obstetric-gynecology surgery, psychiatric sickness, suicide, or others

Accident and emergency services system refer to services provided to the accident and emergency patients under the UCS. Accident and emergency services system are categorized as follows:

1) **Accident and emergency services within the registered provinces** refer to services provided to the accident and emergency patients under the UCS by any hospitals which are located within the same province where the patient register

2) **Accident and emergency services outside the registered provinces** refer to services provided to the accident and emergency patients under the UCS by any hospitals which are located outside the province where the patient register

Referral system refers to the process for transferring patients from one hospital to other hospitals for further necessary treatment, either with or without referral documents that provide treatment information

Universal Coverage Scheme refers to the health program for Thai people who had registered the gold card at the primary care unit and got the appropriate medical care by pay 30 baht per visit to the community hospitals where define the name on the gold card. It was divided into 4 phase as follows:

Phase 1: The first phase started in 6 pilot provinces on April 2001

Phase 2: The second phase was implemented on June 2001 in 15 provinces

Phase 3: The third phase was a nationwide implementation started on October 2001 except the inner Bangkok districts started on January 2002

Phase 4: The project has been implemented to cover the whole country in April 2002

CHAPTER II
LITERATURE REVIEW

The literature review was divided into 5 parts as follows:

2.1 The Universal Coverage Scheme in Thailand

2.2 Management of capitation budget under the Universal Coverage Scheme

2.3 Management of accident and emergency services according to the National Health Security Act B.E. 2545 (2002)

2.4 Reimbursement guideline for accident and emergency services under the Universal Coverage Scheme

2.5 Related researches

2.1. The Universal Coverage Scheme in Thailand

The Universal Coverage Scheme (UCS) has been implemented by the present government of Thailand since April 2001 under the slogan of "*30 baht for curing all diseases*" with the aim to provide access to health care according to health need for the uninsured population.

During the first phase in April 2001, the scheme started in six pilot provinces, then the second phase in June 2001 extended to another 15 provinces. The third phase in October 2001, all the provinces and part of Bangkok have joined the scheme. The rest of Bangkok has started the scheme in January 2002 and expanded to cover the whole country in April 2002. Details were described in Table 1.

The insured were all of the people who were not covered in any health scheme and whose names were in the housing registrations in those provinces. These people would receive the Universal health coverage card or the gold card. This card must show consistency with the individual's identification card every time they access the health services, which were the government health services or the private sector health services registered with this project.

Table 1 Implementation of the Universal Coverage Scheme (30 baht Scheme)

Periods	Universal Coverage Policy
Phase 1: April 2001	Implementation of the UC in six pilot provinces comprising Phayao, Yasothon, Nakhonsawan, Pathumthani, Samutsakhon, and Yala
Phase 2: June 2001	Expansion to 15 provinces comprising Nonthaburi, Saraburi, Sakaeo, Phetchaburi, Nakhonratchasima, Surin, Nongbualamphu, Ubonratchathani, Amnatcharoen, Srisaket, Sukhothai, Phrae, Chiangmai, Phuket, and Narathiwat
Phase 3: October 2001	Expansion of coverage to all provinces, including 13 districts in Bangkok (Buengkhum, Minburi, Klongsan, Kannayao, Nongchok, Sapansung, Ladkrabang, Donmuang, Laksi, Bangkhen, Saimai, Thonburi, and Chomthong) except the inner Bangkok districts started in January 2002
Phase 4: April 2002	Expanding coverage to the whole country

UC beneficiaries could be classified into two groups: UC beneficiaries who were exempted from a copayment of 30 baht per ambulatory visit or hospitalization, and UC beneficiaries who must pay 30 baht for each hospital visit.

The access to health services was through registered government facilities and followed the referral system from the primary health center or the nearby hospital, which were registered under the project. For accident and emergency, the insured could access any nearest government health services. At present, the service package under the UCS included most health care services except cosmetic care, obstetric delivery beyond two pregnancies, drug addiction treatment, hemodialysis, organ transplantation, infertility treatment, and some high cost interventions.

2.2 Management of capitation budget under the Universal Coverage Scheme

In fiscal year 2005, per capita budget of the UCS was increased from that of the fiscal year 2004, 1308.5 baht to 1396.3 baht. The budget was classified into 9 categories and the per capita budget for each category was also adjusted according to previous year experiences. The per capita budget for accident and emergency care was slightly increased. All details were shown in Table 2.

Table 2 The per capita budget for the UCS in FY 2004 and FY 2005

Category	FY 2004	FY 2005
Outpatient care (OP)	488.20	533.01
Inpatient care (IP)	418.30	435.01
Preventive and promotive care (P&P)	206.00	210.00
Accident and emergency care (AE)	19.70	24.73
High cost care (HC)	66.30	99.48
Emergency medical service (EMS)	10.00	10.00
Capital replacement budget	85.00	76.80
Additional budget for remote areas	10.00	7.07
No fault liability budget	5.00	0.20
Total	**1308.50**	**1396.30**

The capitation for outpatient, inpatient, and health prevention and promotion services was directly allocated to the health care facilities, according to the number of local residents who were registered with them. In order to get better risk sharing between hospitals and provinces and enabling access to accident, emergency and high cost care, the National Health Security Office (NHSO) managed these budgets at the central office and directly reimburse to hospitals providing these services to their beneficiaries. The capital replacement budget was allocated to contracted hospital by per capita basis, except for public hospitals. Seven baht per capita of all beneficiaries was allocated to the Ministry of Public Health (MoPH) to subsidize hospitals in remote areas. The no fault liability budget was managed by the NHSO to pay beneficiaries who were adversely affected from medical care without proof of guilty.

2.3 Management of accident and emergency services according to the National Health Security Act B.E. 2545 (2002)

In fact, people may temporary travel from their residence to other areas. At the same time they may become acutely ill or become an accident victim, but it was not possible for them to have access to registered hospitals. According to section 5 of the National Health Security Act B.E. 2545, stated that in cases of accident and emergency, the beneficiaries under the UCS could go for medical care at any nearest health facilities which were the government health services or the private sector health services enrolled with this scheme. There was no limitation on frequency of hospital visit for accident injury, and not more than two times per year for emergency illness.

However, veterans and disabled who were not covered by the Social Security Scheme (SSS) or the Civil Servant Medical Benefit Scheme (CSMBS) could access any government health services and no limitation on frequency of hospital visit.

Definition of ***accident*** and ***emergency*** according to the NHSO guidelines for claim reimbursement under the UCS in fiscal year 2004 (Bureau of Claim Administration, National Health Security Office, 2004) were as follows:

1. **Accident** refer to injuries which caused by external event and occurred unexpectedly
2. **Emergency** refer to
    1) Disease or symptom that require urgent treatment, otherwise it may life-threatening or harmful to the other
    2) Disease that require urgent surgical operation, otherwise it may life-threatening
    3) Disease or symptom as set by the National Health Security Board

Besides all items, additional consideration such as blood pressure, pulse, symptom of disease, diagnosis, guideline for treatment, and urgent need for treatment

2.4 Reimbursement guideline for accident and emergency services under the Universal Coverage Scheme

Health providers which provided services for accident and emergency cases, and were located inside the provinces where the beneficiaries registered, could reimburse cost of treatment from the provincial branch office according to the guidelines set by the subcommittee on the National Health Security.

Health providers which provided services for accident and emergency cases, and were located outside the provinces where the beneficiaries registered, could reimburse total expenditure directly from the NHSO.

In fiscal year 2004, provider payment method for accident and emergency care has been changed in detail in order to reduce concern from providers and protect access to care of UC beneficiaries. At present, the NHSO was responsible for the full payment of accident and emergency care instead of paying only the first 72 hours incurred costs. (National Health Security Office, 2004)

Moreover, reimbursement for accident and emergency care between outpatient and inpatient are different. For outpatient service, reimbursement would be done on point system with global budget. The claim was made on the actual charges for the care provided by super tertiary hospitals, not exceeding 700 baht per visit for the care provided by other level of hospitals. Reimbursement for inpatient care would be done on the Diagnosis Related Groups (DRGs) with global budget basis. The relative weight of each patient is adjusted by the number of hospital days and level of hospital. (Bureau of Claim Administration, 2004)

Car accident-injured patients who are covered by the Protection for Motor Vehicle Accident Victims Act B.E. 2535 (1992) have to reimburse preliminary compensation from Traffic Accident Insurance (TAI) Central Fund. The rest of expenditure can reimburse from the NHSO. Payment the preliminary coverage has to be made by the private insurance companies or the Central Fund to the insured patients within seven days after receiving the claim without the burden of proof on who caused the accident. Under the current TAI regulation, the preliminary coverage for health care expense was limited to 15,000 baht per injured patient. Compensation for a death

case was paid in the full amount of 15,000 baht. For an injury followed by death, the insurance benefit was set at the maximum of 30,000 baht (Health Insurance Office, 1998).

Childbirth delivery was one type of emergency condition. However, health providers which provided services for these cases, and were located outside the provinces where the beneficiaries registered, could reimburse cost of treatment from the NHSO.

2.5 Related researches

2.5.1 Research related to accident and emergency care in the Universal Coverage Scheme

Pongpisut Jongudomsuk and Sarai Ruengdej (2004: 238) studied characteristics of accident and emergency cases in the UCS. It was found that about two-third of accident and emergency cases were inpatients. Almost half of cases were submitted by health facilities in Bangkok and the central region. Injuries and poisoning from external causes were the most common diagnosis for outpatients, whereas vaginal delivery without complication was the most common diagnosis for inpatients. Over supply of health care providers in Bangkok and the central region, and migration of people to these areas without changing their registrations, could be a possible explanation for the higher claims from these areas. Average reimbursement rate was 413.82 baht per visit for outpatient and 7,929.16 baht per admission for inpatient. Tertiary hospitals would get a higher reimbursement, both for outpatient and inpatient, when compared with other health facilities. The researchers commented that payment for inpatient which was based on DRG and was limited only for the cost of treatment during the first 72 hours, then, registered providers had to be responsible for the cost of treatment after 72 hours. This could create unnecessary transfer of patients between health facilities if registered providers were not willing to pay the cost of treatment after 72 hours. They further recommended that flexible registration system, which allowed people to register health facilities close to their houses or workplaces, and more effective provider payment method for accident and emergency cases, which cost of treatment should be totally paid by the NHSO instead of paying partly by

registered providers, could improve the system and protect access to care of UC beneficiaries.

2.5.2 Research related to knowledge, understanding, opinion, attitude, acceptance, and satisfaction of health care providers toward the Universal Coverage Scheme

Charun Boonyarithikarn (2004: 73-74) studied the knowledge, attitude and acceptance of the 30 baht scheme among health care providers at six community hospitals in Sakaeo province. The data was obtained by using a self-administered questionnaire among 316 health care providers during February 1-14, 2004. The health care providers composed doctors, dentists, pharmacists, registered nurses, and technical nurses. The results revealed that majority of them had good level of knowledge on 30 baht scheme (52.6%), while their attitude toward 30 baht scheme was fair (86.7%). The acceptance of the 30 baht scheme, it was found that about 41.5% of respondents had high acceptance while low acceptance was at 58.5%.

Teresita D, Foman-eg (2003: 60) studied the knowledge and attitude of doctors and nurses on the 30 baht scheme in the community hospitals in Suphanburi province. The information was gathered from 163 respondents in seven hospitals through self-administered questionnaire. The findings revealed that majority of them had fair and good knowledge on the 30 baht scheme. Most of them had moderate to high knowledge on the principles of the 30 baht scheme. Further, they had fair attitude toward the 30 baht scheme. Moreover, many accepted that the 30 baht scheme gave people access to hospital services.

Suchitra Ninles (2001) studied the opinion of administrator and health staff toward the 30 baht scheme in Suphanburi province. The results found that the understanding and knowledge about the process of 30 baht scheme was high (26.8%) for health staffs, and higher (27.3%) for administrators. The satisfaction level of the administrators and health staffs was the same at high at 49.2% and 40.6% respectively.

The NHSO contracted the ABAC Poll of Assumption University (2004) to conduct a survey on the satisfaction of service providers in fiscal year 2003. The

survey on the providers' opinions was carried out among a sample of 3,006 respondents in 156 health facilities in 13 provinces nationwide. The providers were physicians, dentists, pharmacists, nurses and health officers. The results showed that on a scale of highest satisfaction of 10, the overall satisfaction score given by the provider regarding the UCS was 6.15 with a standard deviation of 1.80. Their suggestions for the scheme's improvements included a more budget allocation (39.8%) and a benefit package review to meet people's needs (25.6%).

Based on the literature review, there were some studies conducted by several academic institution related to knowledge, understanding, opinion, attitude, acceptance, and satisfaction on the UCS among patients and health care providers. There was only one study conducted by Pongpisut Jongudomsuk, et al (2004) related to AE cases in the UCS. Although this study provided useful information for improvement system, it was analyzed from secondary data by using quantitative method and not all issues may have been covered in detail. It did not provide information about management system for AE services, understanding and attitude toward the AE service system, guidelines for considering emergency illness, process of providing services for AE patients, and problems of providing services to AE patients from provider perspectives. Moreover, after changing provider payment method for AE care, problem of moral hazard and access to care remain the major concerns and also need further improvements. Therefore, it is necessary to further study on this topic by using qualitative method in order to obtain more details of AE service system under the UCS.

CHAPTER III
RESEARCH METHODOLOGY

This chapter consisted of 8 parts as follows:

1. Study design
2. Site of study
3. Research informants
4. Techniques and research instruments
5. Data collection procedure
6. Guidelines for data collection
7. Data collection period
8. Data analysis

1. Study design

Qualitative research method was used in this study to identify more details of the practical accident and emergency (AE) service system under the Universal Coverage Scheme (UCS).

2. Sites of study

By using reimbursement data on inpatient claims for AE care from the National Health Security Office (NHSO**)** during the period of 1 January - 23 September 2004, 17 hospitals located in 6 provinces including 6 regional/general hospitals and 11 community hospitals were purposively selected as the sites of this study. These selected regional/general hospitals were:

- Samutprakan hospital was selected as study site because it was a general hospital which had the highest number of AE cases for reimbursement.
- Chonburi hospital was selected as study site because it was a regional hospital which had the highest number of AE cases for reimbursement.

- Khonkaen hospital was selected as study site because it was a regional hospital which had the second highest number of AE cases for reimbursement and was located in the province in which a regional university hospital located.

- Maharatnakhonratchasima hospital was selected as study site because it was a super tertiary hospital which had the third lowest number of AE cases for reimbursement.

- Phatthalung hospital was selected as study site because it was a general hospital which had the second lowest number of AE cases for reimbursement. It was located in the southern province where the patients easy across to utilize any services at other non-registered hospital such as Hatyai hospital, Songkhla hospital, etc.

- Mukdahan hospital was selected as study site because it was a general hospital which had the third lowest number of AE cases for reimbursement. It was located in the northeastern province where the patients difficult across to utilize any services at other non-registered hospital.

For 11 community hospitals, were purposively selected from those six selected provinces. Only 1-2 community hospitals in each province which were special interesting, for example, it has the high or low number of AE cases for reimbursement, it was located in industrialized area, etc. Name and number of beds of selected 17 hospitals in 6 provinces as study sites were shown in Table 3

Table 3 Name and number of beds of the selected hospitals as study site in each province classified by type of hospital

Province	**Type of hospital (number of beds)**	
	Regional/general hospital	**Community hospital**
Chonburi	• Chonburi hospital (825)	• Panatnikom hospital (120) • Banbueng hospital (90)
Khonkaen	• Khonkaen hospital (714)	• Chumphae hospital (120) • Phuphaman (30)
Nakhonratchasima	• Nakhonratchasima hospital (1,072)	• Dangkhuntod hospital (90) • Chumphung hospital (60)
Samutprakan	• Samutprakan hospital (385)	• Bangphe hospital (60)

Table 3 Name and number of beds of the selected hospitals as study site in each province classified by type of hospital (cont.)

Province	Type of hospital (number of beds)	
	Regional/general hospital	Community hospital
Mukdahan	• Mukdahan hospital (301)	• Kamchai hospital (30) • Nongsung hospital (30)
Phatthalung	• Phatthalung hospital (347)	• Kungkanun hospital (90) • Pakprayoon hospital (30)

3. Research informants

Research informants in each province comprised of the following groups:

1. The provincial administrators responsible for the UCS in six provinces such as the Provincial Chief Medical Officer and/or other administrators assigned to supervise this project, approximately 1-2 persons in each province.

2. The hospital administrators such as the Director of hospitals and/ or other administrators assigned to supervise this project, 17 hospitals with approximately 1-2 persons in each hospital.

3. The officers responsible for the UCS

4. AE service providers consisted of doctors, nurses, and related officers, 17 hospitals with approximately 5-7 persons in each hospital.

4. Techniques and research instruments

The research instruments included document review and interview on each target groups; namely, a group of provincial administrators, a group of hospital directors, a group of officers responsible for the UCS, and a group of AE service providers. Three data collection techniques were used to obtain information from each target group:

1. Document review was used for describing the general information about hospital context related to AE service system.

2. Semi-structured interviews were used for data collection from administrators.

3. Informal interviews were used for data collection from AE service providers.

5. Data collection procedure

In this research, all data was collected by one researcher, myself. The procedure of the data collection was as follows:

1. Before starting actual fieldwork, the researcher was trained in fieldwork data collection by the major-advisor, Asst. Prof. Dr.Wichit Paonil. During the early stage of fieldwork data collection, the major-advisor also went to the field for supervision and guided the interview techniques.

2. Before data collection, researcher would contact and inform about the purpose of the study and ask permission for data collection from the Provincial Chief Medical Officer in each province, and Hospital Director in each hospital.

3. Making the appointment for interviews with administrators and staffs.

4. Before starting interview, the researcher introduced myself, explained the purpose of the study, asked for the willingness to participate in the interview process. Also asking permission to tape record the interviews if possible, or the interviews were noted exactly as possible if they had not been allowed to tape.

6. Topics for data collection

The guidelines for interviews were designed for gathering information from each group of informants: administrators and AE service providers. The issues for data collection consisted of:

1. General information about the hospital context
   - Area condition, hospital location, hospital environment, traveling to hospital both daytime and nighttime, other health facilities in the same or nearby area
   - Management system under the UCS in each hospital
   - Other related system such as referral system, emergency medical assistance system

2. Information from administrators
   - Management system for AE services under the UCS within the province and hospital, and relationship with other health insurance
   - Problems of AE service system, and methods to solve the problems
   - Opinion toward AE service system of hospital
   - Reasons of the high or low reimbursement for AE services
   - Recommendations for improvement AE service system under the UCS
3. Information from providers
   - Understanding about AE service system under the UCS
   - Guidelines for considering emergency illness
   - Process of providing services for AE patients utilizing services outside the registered provinces under the UCS
   - Opinion toward AE service system under the UCS
   - Problems of providing services to AE patients under the UCS
   - Recommendations for improvement AE service system under the UCS

7. Data collection period

The fieldwork period started in March 2005 and completed it in September 2005 (approximately 7 months in total). The researcher spent approximately three days in each Provincial Health Office, two weeks in each regional/general hospital, and one week in each community hospital for data collection. However, fieldwork management was more flexible depending on the difficulties in making the appointments with administrators and staffs. Sometimes interviews with the staffs were undertaken during their service work in order to observe their performance.

8. Data analysis

All interviews were tape recorded with permission from the interviewees. After the interviews, the tapes were transcribed into texts. The transcripts were then summarized. The summaries were used as the basis of analysis within the topic of the stated guideline. Qualitative data analysis was undertook on hospital context, management of AE service system, knowledge and understanding about AE service

system under the UCS, guidelines for considering emergency illness, process of providing services for AE patients, reasons of the high or low reimbursement for AE services, attitude toward AE service system under the UCS, problems of providing services to AE patients, and recommendations for improvement AE service system under the UCS.

CHAPTER IV

RESULTS

The results of this study were presented into 3 parts as follows:

Part 1 General information

Part 2 Management of Universal Coverage Scheme at provincial level

- 2.1 Administrative structure
- 2.2 Budget allocation under the Universal Coverage Scheme at the provincial level
- 2.3 Operations of the Universal Coverage Scheme
- 2.4 Reimbursement guideline for accident and emergency services within the registered province
- 2.5 Patient referral system under the Universal Coverage Scheme
- 2.6 Complaint accepting system under the Universal Coverage Scheme
- 2.7 Opinions of provincial administrators on accident and emergency service system under the Universal Coverage Scheme
- 2.8 Recommendations of provincial administrators for improvement of the accident and emergency service system under the Universal Coverage Scheme

Part 3 Management of Universal Coverage Scheme at general/regional hospital and community hospital

- 3.1 Organization of accident and emergency service system under the Universal Coverage Scheme
- 3.2 Process of providing service for accident and emergency patients outside the registered provinces
- 3.3 Opinions of health care providers on accident and emergency service system under the Universal Coverage Scheme
- 3.4 Knowledge and understanding about the use of right in case of accident and emergency under the Universal Coverage Scheme

3.5 Criteria and guideline for considering accident and emergency

3.6 Factors that caused differences of claim data submission on medical reimbursement in case of accident and emergency in the study area

3.7 Problems and obstacles in providing service to accident and emergency patients under the Universal Coverage Scheme

3.8 Recommendations of health care providers for improvement of the accident and emergency service system under the Universal Coverage Scheme

Part 1 General information

Field work for data collection was conducted in 6 provinces namely Chonburi, Khonkaen, Nakhonratchasima, Mukdahan, Phatthalung, and Samutprakan. The study sites were 6 Provincial Health Office, 6 regional/general hospitals, and 11 community hospitals. The total of 133 respondents was interviewed for this study. The details of key informants were shown in Table 4

Table 4 Number of respondents interviewed classified by status and position

Status	Position	No.of respondents
Provincial administrator	Provincial Chief Medical Officer	4
	Deputy Provincial Chief Medical Officer	2
	Health Insurance Unit in Provincial Health Office	9
Provider	Director of regional/general hospital	2
	Director of community hospital	11
	Deputy hospital director	3
	Health Insurance Division in hospital	21
	Physician in the hospital	22
	Professional registered nurse in the hospital	50
	Other related officer	9

Note Other related officers were registration unit officers and financial officers

Part 2 Management of Universal Coverage Scheme at provincial level

2.1 Administrative structure

All the 6 provinces organized administrative structure in accordance with the National Health Security Board's guidelines comprising 3 provincial subcommittees (see Figure 1):

2.1.1 Provincial Subcommittee on Health Security Administration

The Provincial Subcommittee on Health Security Administration comprised the Provincial Chief Medical Officer as chairperson and the following as members of subcommittee: representatives of regional/general/community/private hospitals, representatives of District Health Office and health centers, representatives of consumers, local administration organization, qualified persons, and head of health insurance group. This subcommittee was responsible for the setting policies for administration of the UC within the province, including appointed the working groups to support for the operations. Meetings were held every 1-2 months for setting up the guideline for budget allocation, monitoring financial situation of health facility, and monitoring and follow-up of the progress in the operations of the UCS at the provincial level.

2.1.2 Provincial Subcommittee on Health Service Standard and Quality Control

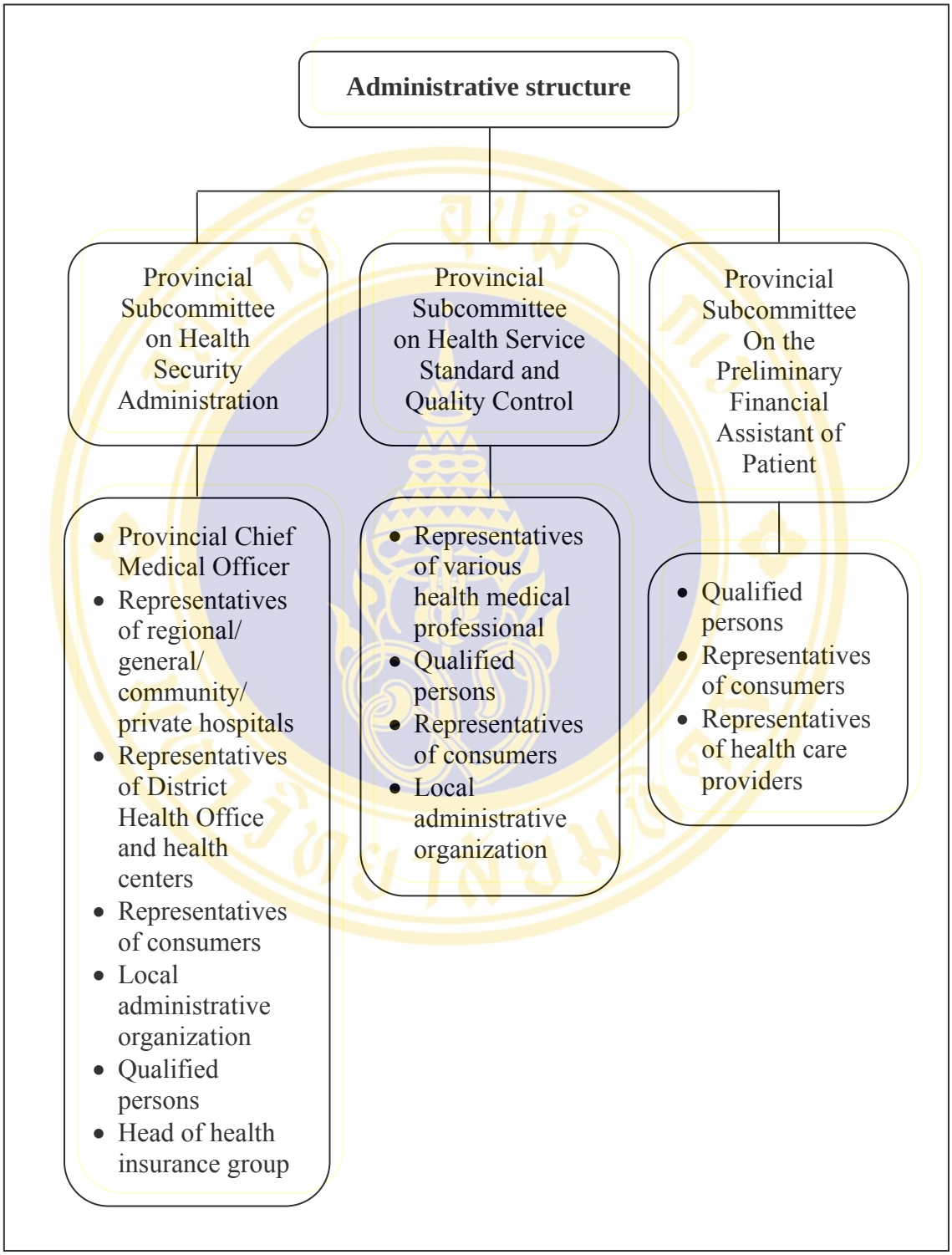
The Provincial Subcommittee on Health Service Standard and Quality Control comprised representatives of various health medical professional, qualified persons, representatives of consumers, and local administration organization. This subcommittee was responsible for monitoring of standard of service units and network of service units, complaints of service quality, provision of information, and promoting and supporting for people participation. The results of operation of this subcommittee were different in each province.

2.1.3 Provincial Subcommittee on the Preliminary Financial Assistant of Patient

The Provincial Subcommittee on the Preliminary Financial Assistant of Patient comprised qualified persons, representatives of consumers, and representatives of health care providers. This subcommittee was responsible for the provision of preliminary financial assistance for the patient who were damaged by medical treatment under section 41 of the National Health Security Act 2002.

Besides, each province set up other working groups to support for the operations within the province. For example, Khonkaen province set up six working groups: Health Security Administration Subcommittee at District and Sub-district (Tambol) level, working group on health care financial system, working group on health facility standard assessment of service units, working group on high cost drug lists, working group on drug list of hospitals, and working group on medical record audit. Chonburi province set up three working groups: Subcommittee on development of education, Subcommittee on development of health resources, and Committee on grievance management.

Figure 1 Administrative structure of universal coverage scheme in provincial level



2.2 Budget allocation under the UCS at the provincial level

The capitation rate for fiscal year 2005 was 1396.30 baht per capita. 218.28 was deducted and transferred to the Central fund for capital investment budget, high cost care, accident and emergency care, emergency and medical service, budget for remote area, and budget for preliminary assistant of patient. 13.33 baht per capita was deducted at the central level for cost of vaccines. The rest of budget (1164.69 baht per capita) was allocated to the province according to the number of registered population in those provinces and then adjusted by using age structure of population and cut off salary at the national level. Budget allocated to each province in fiscal year 2005 ranged from 375-585 baht/person/year. Budget allocation at regional/general hospital was in the range of 375-485 baht/person/year while budget allocation at community hospital was in the range of 565-585 baht/person/year.

Exclusive capitation model was adopted for all 6 provinces. The budget for outpatient care (OP) would be paid to the CUP on a capitation basis. The inpatient care budget (IP) would be managed at the provincial level; and hospitals could be reimbursed based on the DRG. The information from 6 provinces showed that there were various models of budget allocation in each province.

2.3 Operations of the Universal Coverage Scheme

According to field data collection in six provinces, it was found that Nakhonratchasima was only one province enrolled in the second phase of the UCS that started in June 2001. The 5 remaining provinces enrolled in the third phase of the UCS that staeted in October 2001.

The operations of the UCS in term of health insurance coverage of population showed that the overall health insurance coverage of population of every province was increased. All provinces were accelerating to explore and monitor uninsured population (non-registered person) in their responsible areas in order to register and issue health insurance card. In addition, people changing registered hospital were monitored including the duplication of health insurance rights in order to correct and submit data to the NHSO for updating database.

2.4 Reimbursement guideline for AE services within the registered provinces

Regarding the payment criteria for AE was mainly as same as previous year. Some details were changed. In the fiscal year 2003, the NHSO was responsible for compensation of medical expense in case of AE which was occurred within the first 72 hours. The rest of medical expense would be paid by the registered hospital of patients. Subsequently, in the fiscal year 2004, the NHSO had changed payment criteria for patients in case of AE who had taken medical service outside the registered province. The payment was conducted according to DRGs with global budget. The payment criteria which medical expense was paid by the Central fund for not over 72 hours was changed to be paid by the Central fund until the end of treatment. The registered hospital didn't need to pay for such variance.

According to field data collection, some provinces were affected from the NHSO's examination on medical reimbursement for the fiscal year 2002-2003. Since the NHSO had deducted the medical service charge in case of AE which was paid in advance for the registered hospital under the budget allocation in the fiscal year 2003-2004 and the NHSO had submitted data which hadn't been advanced and the registered hospital had to be responsible for the medical expense in the fiscal year 2002-2003 to the province for examination and payment to hospitals in the fiscal year 2004, it affected the budget the hospital would receive in the fiscal year 2004. The province had set aside the fund at the Provincial Health Office in order to pay on behalf of the registered hospitals. For such effect, it caused Health Insurance Department of Provincial Health Office to propose the Provincial Subcommittee on Health Security Administration for approval of budget for the UCS in the fiscal year 2004 in order to repay debt on medical service charge in case of AE which exceeded NHSO's responsibility during the fiscal year 2002-2003, for which normally the registered hospital should be responsible. Therefore, it affected CUP and caused CUP to reduce the allocation of budget for the UCS in the fiscal year 2004.

Services for AE cases provided by any hospitals which were located within the same province where the patients registered, would be reimbursed cost of treatment from the provincial fund under criteria specified by the Provincial Subcommittee on Health Security Administration. Services for AE cases provided by any hospitals

which were located outside the province where the patients registered, would be reimbursed cost of treatment directly from the Central fund. The budget was set at 24.73 baht per person. According to the study, there were only 2 provinces: Chonburi and Khonkaen where had deducted some money at the province for expenses in case of AE within the registered province. The 4 remaining provinces had not deducted money for expenses in case of AE within the registered province, but had included it in the budget for outpatient care and inpatient care and the hospital would collect and pay the money by itself. However, some provinces had interesting method for reimbursement. For example, Chonburi province had established a committee for consideration of medical expense payment from money provided at the province and had assigned the creditor hospital to submit evidence for collection to the Health Insurance Department of Provincial Health Office within 60 days after discharge in order to examine the correctness of evidence and finally pay to the creditor hospital. The "clearing date" would be held once a month at the province and the representatives of every hospital were invited to attend this meeting for debt repayment between creditors and debtors. Problems on reimbursement would be considered in the meeting until it was mutually approved. This operational procedure not only made unit, but also the officers of each hospital could meet each other and well cooperated among hospitals.

As for the criteria and guideline for consideration of emergency illness in the provincial level, every province had complied with the criteria as specified by the NHSO which was fundamental criterion or guideline for consideration of emergency. Additionally, some provinces had determined their own criteria and guideline for consideration of emergency which contained the different details. For instance, Khonkaen province had determined symptom and disease which were in the criteria of emergency under provincial criteria and had identified that patients who were admitted in the hospital shall not be considered as emergency. However, the emergency case shall comply with the provincial criteria only that was such patient being admitted in the nearest hospital and his/her symptom or disease was in the criteria of emergency case under agreement of the province. Meanwhile, Nakhonratchasima province had determined that patients who need to be admitted in the hospital shall be considered as emergency case and was allowed to use the rights. The remaining provinces hadn't

specified any criteria for consideration of emergency in the provincial level, but they depended on the discretion of doctors who provided treatment in each hospital.

2.5 Patient referral system under the Universal Coverage Scheme

The patient referral system under the UCS, it was found that every province had specification of procedures and practice guidelines in referring patients from primary care level (PCU, health center) to secondary unit (community hospital) to tertiary unit (general hospital, regional hospital) including the method of payment in case of referring patients both within and outside the province clearly. All 6 provinces had determined the patients to use service under the procedures. The patient with over cured disease would be referred to higher efficient hospital. In case that patients bypassed to receive service at other hospitals without being referred (no accidents and no emergencies), the patients could not use gold card and had to fully pay out of their own pocket. According to the study, there was only one province: Mukdahan allowing the patients to bypass to other hospital within the province for any conditions of illness in case that the patients use service of wrong procedures only for the first time without charging patients but letting the registered hospital to pay only 50 percent of actual expense.

Guidelines for referrals of patients among hospitals under the UCS were as follows:

- Referral of patients from PCU or health centers to community hospitals within their networks would not have referral documents.
- Referral of patients between community hospitals or referral patients from community hospitals to general/regional hospitals would have referral documents.
- Referral of patients from MoPH hospitals to specialized hospitals or university hospital or other non-MoPH hospitals both within and outside the province would have referral documents.
- Referral of patients to another province, the community hospitals must refer patients pass the general or regional hospitals first for all case (except over cured disease) and would have referral documents

The budget for referral system of each province was different. Some provinces set aside the budget as fund at the province in order to pay for the registered hospital in case of referring patients to the hospital within the province and in case of referring patients to outside the province for both inpatients and outpatients. Some provinces set aside the budget as fund at the province in order to pay for the registered hospital in case of referring only inpatient within the province and in case of referring to outside the province. The outpatient who was referred to the hospital within the province shall be paid by the registered hospital.

Payment rate of medical expenses for referral of patients among hospital was as follows:

- For MoPH hospitals, payment for outpatient care was made on an actual-cost basis, not exceeding 700 baht per visit. Additional payment for extra examination such as CT-scan, ultrasound, angiogram, tumor marker, IVP. Payment for inpatient care was made on DRG basis with one relative weight (1 RW) that equals 4,000 baht in all level of hospitals.
- For non-MoPH hospitals, the payment was made as criteria set by the NHSO. Payment for outpatient care was made on an actual-cost basis. Payment for inpatient care was made on DRG basis with one relative weight (1 RW) that equals 10,300 baht in all level of hospitals.

In addition, some provinces showed that the there were many problems on referring patients to outside the province. Because there was only one surgeon in the province, they had to be responsible for expenses by paying to the hospital outside the province.

2.6 Complaint handling system under the Universal Coverage Scheme

The Provincial Health Office and every hospital established a unit for accepting complaints and providing information about benefit package to patients. This unit also answered any inquiry concerning the rights of the gold card and solved the problems on medical services through several channels such as complaint box / cabinet, direct line system, website, and etc. Most of the complaints were related to the inconvenience to receive services, unavailability of services according to the rights,

and being charged without the rights to charge. Every province had the complaint management system conducted by the committee who was responsible for negotiation. Most of problems could be ended.

Some patients had complained at the Provincial Health Office. For example in one province, a case who received medical service at the non-registered hospital in case of emergency illness complained that he was charged from the hospital. A head of Health Insurance Group of a Provincial Health Office shared her experience about complaints that a child patient who had a gold card of the community hospital went to see the doctor at a private clinic and he was advised to go to the hospital immediately because this child had high fever and had convulsion. Then, he had been admitted in the provincial hospital located in the same province. Finally, it appeared that this patient was charged of medical expense by the hospital. A nurse claimed that this patient had gone to the clinic before being admitted in the hospital; therefore, it was not considered as emergency case. After considering the matter of fact, the hospital had to return money to the patient. Refer to the expressions as follows:

> *"…A sick child was brought to see the doctor at the private clinic in town. The doctor said that this child had to be admitted in the hospital and he wrote a referral letter for submitting to an OPD officer. Then, the OPD officer admitted this child in the hospital. Because this patient had a gold card of the community hospital, the hospital officer charged him the medical expense about 3,000 baht. The patient had referred the gold card handbook and claimed that in this case this patient was in emergency because the doctor advised him to be admitted in the hospital. A nurse replied that this case was not emergency, so the hospital charged him the medical expense. The parent of this child patient came here (Provincial Health Office) to consult. According to the regulation, she knew that the hospital could not charge. Therefore, I (head of Health Insurance Group, Provincial Health Office) went to (name of provincial hospital) and explained that the hospital could not collect money in this case because the child had high fever and had convulsion and the doctor at the clinic advised to admit this child in the hospital. Finally, the hospital had returned the medical expense of 3,000 baht to the patient. When asking the nurse, she said that this case had gone to see the doctor at the clinic. However, it was not reasonable if this child went back to (name of community hospital) where was far from the city about 30 km. It would be in trouble because this child had convulsion. The distance from community hospital to provincial hospital was 60 km…"*
>
> (Head of Health Insurance Group, Provincial Health Office)

2.7 Opinions of provincial administrators on accident and emergency service system under the Universal Coverage Scheme

The opinions of provincial administrators toward AE service system under the UCS consisted of several issues as follows:

- The adjustment of payment method in case of AE may affect in the provincial level if the budget for AE allocated at the Central fund was increased in order that the hospital could reimburse all expenses from the Central fund and the registered hospital shall not be in burden for the remaining expense because it has reduced the allocated budget in provincial level.

  "…It would affect in the provincial level, if the allocated fund at NHSO was not adequate, you (NHSO) had to adjust and the budget allocated to the province was reduced…"
  (Provincial administrator, Provincial Chief Medical Officer)

- The Traffic Accident Victim Protection Act should be merged with the UC fund.

  "…A problem on Traffic Accident Victim Protection Act showed that people didn't want to use the Traffic Accident Victim Protection Act. It should be merged with the UC fund. People would not be in trouble and the insurance companies would be a sleeping partner (Ser-Non-Kin)…"
  (Provincial administrator, Provincial Chief Medical Officer)

- The budget for AE should be allocated to the province in order to support its management and should be paid by itself because there was an advantage or a disadvantage between small provinces and big provinces. In addition, the areas for receiving the service in case of AE outside the registered province were not the same.

  "…The budget for AE should be allocated to the province and the province would collect by itself. The big province would be disadvantaged. We almost paid all case, while the small province was deemed as outside the registered area. Therefore, the Central fund would pay medical expense for the small province. My province covered a population of 2 million, we would have enough money to pay. But now we received the money as equal as other areas. Our province was as equal as 8 small provinces and we received the services

less than other areas. If the accident occurred only in 8 small provinces, we had to pay by ourselves…"

(Provincial administrator, Provincial Chief Medical Officer)

- The budget for AE should be allocated to the province in order to manage by itself. The budget in case of AE allocated at the Central fund may cause a problem on reimbursement because the amount of reimbursement from the Central fund depended on the ability of officer who was responsible for reimbursement of each hospital.

"…The allocation of budget at the Central fund caused a problem on who would be able to reimburse the medical expense. An officer who followed the process would get less reimbursed money, while an officer who was tricky would get much money. If the budget for AE was allocated to the province, each province could manage this budget by itself without depending on the Central fund. Each province could estimate its own expenses. The remaining budget may be used for other purpose, in case that there were a few patients from accident…"

(Provincial administrator, Provincial Chief Medical Officer)

2.8 Recommendations of provincial administrators for improvement of the accident and emergency service system under the Universal Coverage Scheme

According to the interview with the provincial administrators such as the Provincial Chief Medical Officer and other administrators who were responsible for the UCS, they recommended the guideline for improvement and development of AE service system under the UCS. Details were as follows:

- Budget allocation should separate salaries of health worker in public hospitals from the per capita budget and should increase the per capita budget properly.

- The coordination between the NHSO and MoPH should be improved for mutual understanding because there were many commanders. The policy shall comply with MoPH, while the budget shall comply with NHSO. Therefore, it was inconvenient for operators.

"…NHSO and MoPH should coordinate to each other. If not, the operator would be in trouble because one controlled money and another controlled power…"

(Provincial administrator, Provincial Chief Medical Officer)

- NHSO should report to Provincial Health Office on the administration of the AE fund. In addition, NHSO should show how much budget for AE is reimbursed. If there is any remaining budget for AE, the budget allocation for AE at the Central fund should be reduced in the next year.

"…If it's possible, the NHSO should review how much money for AE was reimbursed for each year and how much for the claim, what the percentage was, and how much it remained. If it was enough, it'll O.K. If the amount of remaining budget was high, the budget for AE in the next year should be reduced. The budget would be allocated to the province. As for the management system of the AE fund, they should report us how they managed AE fund for every 3 months or 6 months or once a year…"

(Head of Health Insurance Unit, Provincial Health Office)

- The NHSO must create understanding about the condition on the application of rights in case of AE to the public. For example, to clearly explain what case was considered as emergency in order to reduce the conflict between service users and health care providers.

"…Must make an understanding among people about the definition of emergency illness in order to reduce the conflict on what accident was. Misunderstanding could cause trouble with the health officer…"

(Provincial administrator, Provincial Chief Medical Officer)

"…Who would decide on what case was emergency ? The project should communicate with people for better understanding. People should know which case was considered as emergency. We should give them a sample case such as headache was not emergency but appendicitis was emergency. If people understood, the project would be efficient…"

(Provincial administrator, Deputy Provincial Chief Medical Officer)

Part 3 Management of Universal Coverage Scheme at general/ regional hospital and community hospital

3.1 Organization of accident and emergency service system under the Universal Coverage Scheme

3.1.1 Guideline for providing service to the patients in case of accident and emergency of each hospital

The guideline for providing service to the patients in case of AE under the UCS indicated that all public hospitals provided service mainly on patients centered. They emphasized to provide treatment according to medical standard and take care of patients until the patients' condition was over the critical phase. In addition, the patient would be referred to other hospital where had higher efficiency of treatment both within and outside the province for proper treatment, regardless the right of patients and availability of hospital's reimbursement. However, if the patients were able to pay the medical expenses, the hospital could charge from the patient. If the patients could not afford the medical expense, they were exempted from the payment under the consideration of hospital social workers.

3.1.2 Establishment of unit for protecting patient's rights in each hospital

Every hospital had established a unit or working group in order to protect patient's rights under various health insurance schemes such as UCS, SSS, TAI, and CSMBS which were called by each hospital in different names such as Health Insurance Center, Right Protection Center, Health Welfare Center, Social Welfare Center, etc. The mentioned unit had major responsibilities to examine and certify patients' right, to follow up and gather patients' documents / evidences for supporting the reimbursement of medical expense, to submit the reimbursement and collect the medical expense, to provide information and consultation about the right of treatment to patients, to accept the complaints, and to cooperate with other related organization both within and outside the hospital.

The administrative structure of UCS in each hospital was both similar and different. Some hospitals combined all various health insurance schemes together for convenience of coordinating with each health insurance scheme. Some hospitals had clearly separated each type of health insurance scheme. For this performance pattern, if there were problems about cooperation among units, it should affect directly to the use of patients' right. For example, in case of the patient who had a gold card and had a car accident, he had to use the right under the Traffic Accident Victim Protection Act first and the right under the gold card was followed. Some hospitals combined health insurance unit and registration unit together for more convenience operation. Some community hospitals did not arrange the structure to support the UCS, but they additionally assigned the existing unit to be responsible for this scheme such as planning and information unit, hygiene and disease prevention unit, and etc. However, because of the unclear policy and frequently changed regulation and officers lacking of experience and not understanding the regulations, the problems on operations had occurred and the adjustment should be made in the early stage of UC implementation.

According to the study, it was found that the information service system involving the patients' right protection in each hospital was different. Some hospitals still not fully operated while some hospitals tried to find the right for all patients both outpatient and inpatient under the concept of **"everybody had a right"** in order to maintain the benefit of both patients and hospitals that provided treatment as well as to follow up the documents / evidences from patients for supporting the right and to solve the problem on the patients' right.

3.1.3 Development of the service system for patients in case of accident and emergency of each hospital

The result found that several hospitals had developed and improved their service system for patients in case of AE to be more efficient as well as to protect and reduce the problem on loss revenue because the hospitals could not reimburse the medical expense from the NHSO. This could be done in several methods such as the strictness on showing evidence for the patient utilizing the service, the strictness on examining the right of patients before providing services, the development of

computer system for examining the patients' right, the development of database of the hospital to be more precise and updated, and the development of collection system of medical expense in case of AE patients from the NHSO. As for the examination of patient's right, each hospital had different strictness of right examination. Some hospitals examined the right of all patients, both inpatient and outpatient from Internet before providing service, especially in case of inpatient because the cost of medical treatment was high. Meanwhile several hospitals could not examine the right of every patient because of personnel limitation and large number of patients. Therefore, some hospitals preferred to examine the right of patients who had gold card registered in other area, patients before being referred to other hospitals, patients who had a problem on the right, suspicious patient such as being unable to use the right, being in labor-age group, or being suspected as duplicated right. Some hospitals examined the right of patients periodically such as every 3-month.

3.1.4 Beneficiaries database for examination of the right

The beneficiaries database was necessary. It could help the hospital to efficiently serve the patients in case of AE. This point was a problem at early stage of UC implementation because the beneficiaries database of each health insurance scheme was not linked. Therefore, the examination of the right became duplicated problem among health insurance funds. At present, UC beneficiaries database had been developed and linked with other heath insurance database. The registration of the gold card would be conducted through Internet of NHSO. In addition, before issuing a gold card, every hospital had to examine the data every time which could solve the duplicated problem among the health insurance funds. However, the problems on the duplication of health insurance rights still remained because in the actual situation, the right of patients was changed all the time according to the working status which was changed from a health insurance fund to another. For instance, having social insurance of employees, re-entry or resignation, and migration of people to work in other areas, were factors affecting the database system which was also developed all the time.

Therefore, in case that the gold card patient came to receive service in case of AE outside the registered province, the hospital that provide service had to check

patient's right as well as to examine whether this patient had the right to receive AE service outside the registered province or not. The examination could be made by requesting for "claim code" in order to guarantee the reimbursement of medical expense from the NHSO. However, the request for claim code in case of emergency outside the registered province could not exceed 2 times/ person/ fiscal year. The hospital then could reimburse medical expense from the NHSO. Currently, NHSO had developed the examination system and the system for requesting claim code. Therefore, the examination of the right was easier and more convenient. The hospital could examine the right through website of NHSO for all 24 hours. There were 2 methods of the examination: 1) to search by using identification number (13 digits), or 2) to search by using name and surname of patients. According to the interview with the health insurance officers of each hospital, most of them told that they usually searched the right by using identification number. There would be some mistakes if they searched the right by using name and surname of patients because the patients always misspelled their name or sometime the patient's name was identical to others. Thus, every hospital could check the right of every patient who had identification number (13 digits) via Internet whether the patient had gold card or not.

Additionally, it was found that the health care providing in case of emergency outside the registered province was limited the time of service which shall not exceed twice a year. If the hospital found that the patient used the right in case of emergency outside the registered province more than twice a year, the hospital had to clarify and explain. However, some respondents also told that the examination whether the right was fully used or not was to waste the time and increase their workload to examine every time of providing service. In fact, the patients' rights were difficult to be checked. With this regard, they proposed that would it be possible for patients to use their right in case of emergency illness with no limitation?

> *"…The determination of getting medical service outside the registered province in case of emergency was only 2 times a year. I thought that it was difficult to examine. In my opinion, if it's possible, it should not limit the times of service in order to fully serve people. But I didn't know what the actual problem was. I thought it was unnecessary to limit the times of only twice a year. The patients came here because they thought that they were in emergency case. Although we (officer) tried to explain them, the patients may not*

understand. So, I thought that it was better if all emergency cases were able to use gold card in the public hospitals without limitation of service times…"
(Nurse in regional hospital)

3.1.5 Providing service for patients in case of accident and emergency out of the official hours

During the regular working hours, there was no problem in providing service for patients in case of AE outside the registered province because the Health Insurance Division was responsible for the examination of the right and requesting for the claim code as well as solving the problems that related to the patients' rights. However, out of the official hours, several hospitals had many problems because some hospitals could not examine the right of patients through Internet for 24 hours. Besides, the condition of the gold card indicated that the patients were able to use gold card outside the registered provinces for emergency illness only 2 times a year. When the patients had fully used the right in case of emergency, they could not use the right anymore in that year, even in the emergency case. As a result, there were problems in providing service to the patients in case of AE out of the official hours. The study found that each hospital had different practice guideline on the use of the right. Some hospitals allowed the patient to use the right as emergency case by examining the gold card and identification card of patients and asked the patients whether they had been used the right in case of emergency at other hospital or not. The result was the hospitals may not be able to reimburse the medical expense as they provided. Some hospitals did not allow the patients to use the right for emergency case and collected the medical expense from the patients instead. Some hospitals allowed only the inpatients to use the right in case of emergency because they could examine the right in the following day, while the outpatients were not allowed and they had to pay by themselves. In this case, the patients would complain afterwards. Many hospitals tried to solve this problem. For example, some hospitals extended the working hours for providing service of Health Insurance Division and opened it on weekend and public holidays. Some hospitals extended the system of examination the right via Internet at the registration unit and emergency room.

3.1.6 Receiving service in case of accident and emergency outside the registered province

For receiving service in case of AE, the patients had to show their gold card and identification card every time of using service (for children under 15 years, the birth certificate was required). However, the problems were the patients who came to receive service in case of AE often did not bring evidences for using their right. The health care provider agreed that some patients did not give an importance on the right of the gold card. They did not take the gold card and identification card with them when travelling. Therefore, the problem on using the right had occurred. The examination would be more difficult, if there was no evidence of the right. Besides, the Internet sometimes had failed, the examination of the right could not be proceeded. The study showed that each hospital had different strictness on showing of evidence of the patient's right. Some hospitals required the patients to show both their gold card and identification card. If the patients could not show any evidence, they could not use the right and had to be collected money for medical expense. In some cases, the patient had no gold card, but he had an identification card or other official card with photo, the health insurance officer would examine the right from Internet and would relax for this patient to use the right without paying any medical expense. In some hospitals, the patients were request to pay first and they could receive the money back from the hospital after completed the documentary process.

3.1.7 Patients who came to receive accident and emergency services outside the registered province

In case of the patient who had a gold card and came to receive AE service outside the registered province, the health care providers in several hospitals informed that they would explain the patients about their right of receiving service in case of emergency for not exceeding twice a year and notified the total medical expense to the patients in order to give a chance for decision making whether they would use the right or not. From the experience of health care providers, they found that for hospitalized illness as inpatients, most of patients decided to use their right for emergency case because the cost of treatment was high. On the other hand, for non-

hospitalized illness as outpatient visits, some patients decided not to use their right for emergency case because the medical expense was not high and they chose to pay for medical expense by themselves in order to keep their right for the next visits. According to the above data showed that the treatment cost per time was the important factor that affected the decision making of the patients in selection to use the right for emergency case.

> *"…We (nurse) would advise patients about their right. Some patients didn't know that in case of emergency they could use the right only twice a year. We had to explain and let patients to make a decision whether they would use such right of emergency or not. In addition, we informed them about the medical expense and advised that if they could afford, they'd better pay because they could keep their right on emergency for the next time…"*
>
> (Nurse in regional hospital)

> *"…Before the patients used their right, I (nurse) would tell them because almost 100% of patients did not know that in case of emergency they could use the right only twice a year. Before the patients paid the medical expense, I would tell them the medical expense in case of outpatient. They could choose whether to use the right or not. If they used the right, they would lose one time of emergency right…"*
>
> (Nurse in community hospital)

> *"…I (nurse) would inform patients that they were able to use gold card outside the registered area only twice a year and notify them the medical expense. I would ask them whether they paid by themselves or they preferred to use the right. If they selected to use the right for this visit, they would have only 1 times left for this year…"*
>
> (Nurse in community hospital)

> *"…If the medical expense of this time was not much, some patients decided not to use the right of emergency. The patients told that they would like to keep the right for the serious case in the next time. Anyhow, most of inpatients decided to use the right because they were not sure whether they came back here again or not…"*
>
> (Nurse in community hospital)

> *"…The patients didn't know the limited times; therefore, I (nurse) had to inform them that they could use the right of emergency for twice a year and asked them whether to use the right or not. The patients also asked me about the medical expense at this time. If it was in the end of the year, the patients would use the right. But if it was in the early year, some patients would not use…"*
>
> (Nurse in community hospital)

"…We (nurse) let patients to make their decision. They could use the right only 2 times a year. If the patient considered that the medical expense of this time was not much, they were able to keep their right for the serious case. They could choose whether to use the right or not…"

(Nurse in community hospital)

3.1.8 Migrant labor group who utilizing services outside the registered provinces

For the migrant labor group who moved away from their residence to work in other provinces or people who lived outside the registered area for a long time had to use the right in case of emergency illness at other hospitals that were not indicated in the gold card. This may cause a problem of receiving service in case of general illness or in case of emergency illness exceeding twice a year. The study found that the officers in most hospitals would advise the patients to move their census registration to the area where they lived or to change the registered hospital for convenience of using service in case of illness. Although the NHSO currently had adjusted the rules in changing the registered hospital in case of moving the address that would move census registration or not by allowing the house owner or community leader to certify that these patients lived in this area. Changing the registered hospital could be made not more than 2 times a year. In fact, there were many problems in practice. Some people could not move their census registration because they could not provide the certification of the house owner or incomplete evidence for moving. Some people didn't pay attention or had no time to change the registered hospital. However, some people didn't want to change the registered hospital because of many reasons such as they always moved their working place or they temporarily worked here and would go back to their hometown, and etc. Although the reasons of migrant labors who did not change the registered hospitals could not be clear indicated, but the above data reflected that the problems on accessibility of health care service of labor group still remained. Therefore, it was very important for the NHSO to adjust the condition to be more appropriate and flexible than of present in order the migrant labor group could access to health service equal as the other groups. The following expression reflected the above reasons.

"…I (head of health insurance division) would tell the patients that they could use the right in case of emergency twice a year. They'd better change the gold card to this area because they had to work here for years. However, the house owner had to certify that they really lived here. Currently, they could change the registered hospital without moving the census registration but the house owner had to certify their living…"

(Head of Health Insurance Division in regional hospital)

"…I (head of health insurance division) would ask the patients whether to live here permanently. If they lived here for a long time, I advised them to change the gold card. They could move their house registration or not but they had to be certified of their current address by the community leader or house owner…"

(Head of Health Insurance Division in community hospital)

"…Some patients didn't want to move, although we advised them to move. You didn't need to move the census registration, but only the certification of the house owner. You could move the gold card to register here. However, the patient told that she didn't want to move out from her previous hometown because she was afraid that she would lose her house…"

(Head of Health Insurance Division in community hospital)

"…We (doctor) tried to recommend patients to move their right to this area. But there were many problems concerning the certification of the right, movement of the right, certification of census registration, leader of community, and the patient's affair. The patients sometime knew that they would not live here permanently and some came here for two months. Therefore, some didn't want to change the gold card. Some had to move their work all the time such as construction worker. They had to move to other construction site and sometime they moved here for only 3 months. So they didn't want to change the gold card because it took months to complete…"

(Physician in community hospital)

"…If the patient tended to live here for a long time, I (nurse) would told them to move the gold card to this area. They had no need to move their census registration. The northeastern workers worked here, they were not sure whether to live here for a long time or not. It depended on their work, so they didn't want to move the gold card here…"

(Nurse in community hospital)

"…We (nurse) had to consider how long they (patients) would live here. If the workers from other provinces lived here for a long time and their census registration was in other province, they should move the right here for convenience of usage of the right regardless limitation of emergency case not exceeding twice a year. The patients didn't know how many times they could get. We would ask how long they would stay here, whether they lived here, or

where they registered the census registration, or whether they only visited here. We had to consider on case by case basis. If they said they did not live here, it was O.K. In case that we doubted whether they worked here or not and the census registration was in other province, we would advise them to move the census registration for convenience to get service without any problems…"

(Nurse in community hospital)

"…Actually the patients didn't know that they could use the claim code only twice a year. Since the campaign only announced that the right could be used all over the country. So we (nurse) would tell the patients that they could use the right in case of emergency only twice a year. If we found that the patients used their right more than 2 times a year, we would ask them whether they lived here permanently. If yes, we advised them to register at this hospital. If their answers were temporary live, we advised them that next visit they had to pay by themselves…"

(Nurse in community hospital)

"…Most of children had followed their parents or their mothers worked in Bangkok, so they had to live here with their grandparents. Some children's parents worked in other province and the registration was in other province. So we had to advise them to register the gold card here in case that they lived here permanently for their convenience of requesting for the claim code which was allowed only twice a year…"

(Nurse in community hospital)

3.2 Process of providing service for accident and emergency patients outside the registered provinces

The result found that every hospital had similarly procedures of providing service for patients in case of AE outside the registered province. However, there were differences on the details of procedures. The steps of providing service were as follows (see Figure 2 and Figure 3):

1. A gold-card patient who came to receive service outside the registered province had to show the gold card and identification card at the registration unit in order to examine the correctness of documents / evidences.

2. A patient met the doctor and was diagnosed the illness whether it was accident or emergency case.

3. The officer at the inpatient ward/ OPD/ ER notified the Health Insurance Division or advised the patients / relatives to contact at Health Insurance Division in order to examine the right through Internet and examine whether the patient could use

the rights in case of emergency illness outside the registered province or not as well as to request for the claim code in order to reimburse medical expense at the NHSO.

4. After examining and the patient was eligible to use the right, copy a gold card and identification card or census registration of the patient with signature for certification in every copy. In addition, the patient had to sign on the form of "Receiving medical expense reimbursement in case of accident and emergency" as reimbursement evidence.

5. When the treatment process was finished or after the inpatient was discharged, the officer at the inpatient ward/ OPD/ ER gathered the documentary evidences and sent to Health Insurance Division for collecting money from the NHSO as follows:

- Copy of UC card (gold card)
- Copy of identification card
- Form for receiving medical expense reimbursement in case of accident and emergency. Complete the details with signature of the patients.
- Medical expense Form for outpatient (Form Nor Kor.1) or Medical expense Form for inpatient (Form Nor Kor.2) as the case may be.
- Copy of other related medical record

6. The Health Insurance Division would examine the correctness and completeness of all documentary evidences. In case of incomplete documentary evidences, the officer would follow the documentary evidences from patients/ relatives or related agency. When receiving all documentary evidences, the claim data would be recorded for collecting money from the NHSO.

7. Sent claim data of the patient for collecting money to NHSO in the electronic form as follows:

- For outpatient, recorded the data in DRG Mx program and sent to NHSO within 30 days after providing service.
- For inpatient, recorded the data in NHSO program and sent to Central Office for Health Care Information (CHI) within 30 days after discharge of patients in order to analyze DRG and Relative Weight (RW)

8. After the hospital had sent data to NHSO (by DRG Mx Program) and CHI (by NHSO Program), NHSO and CHI would examine the preliminary data and notify the acceptance of data back to the hospital. The document of acceptance was replied via electronics. In case the hospital sent data that did not pass the preliminary examination because of some errors of data, the details of errors would be notified in order that the hospital could correct such data and resent the data again.

9. When receiving the document of acceptance, the hospital would examine such data and correct the errors and resent the amended data to NHSO or CHI within the specified period (all procedures from the first submission to the pass of amended data would not exceed 30 days after the date of discharge of patients).

10. When it was due of data submission of the month (30 days after discharge), CHI would gather data of patients which was based on the date of discharge as a criteria of cutting balance of each month and would send the statement to the hospital.

11. After receiving the statement from CHI, the hospital would send a letter for collecting money under the form as specified by NHSO to NHSO in order to reimburse the medical expense from the NHSO. When NHSO received the letter for collection, NHSO would pay to the hospital by transferring into the bank account of the hospital.

Figure 2 Flow chart of providing service for accident and emergency outpatients

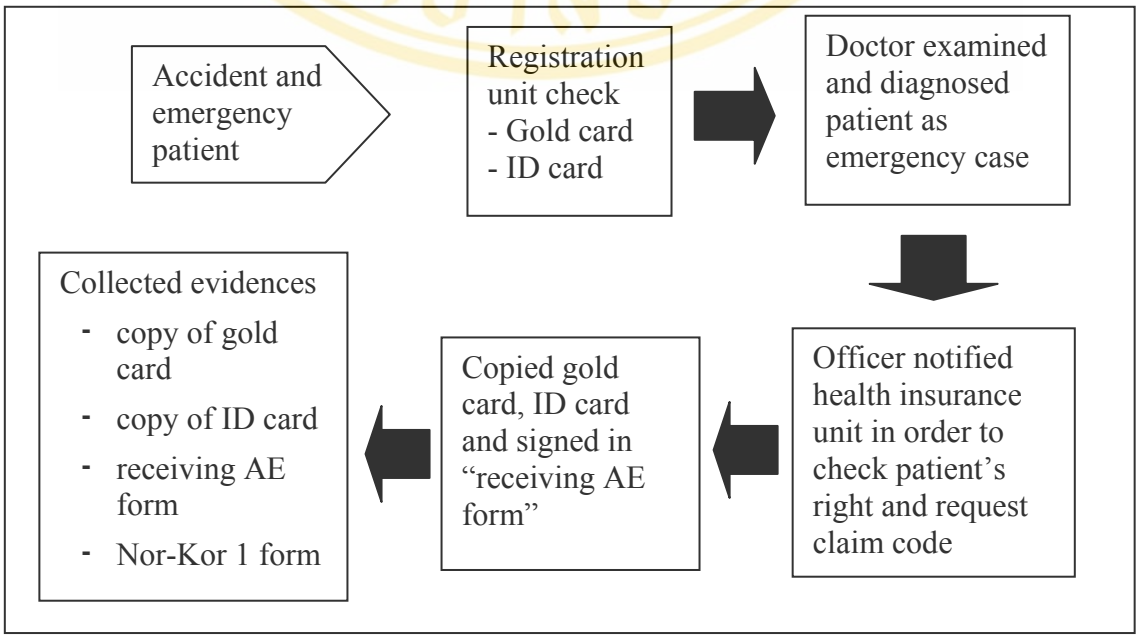
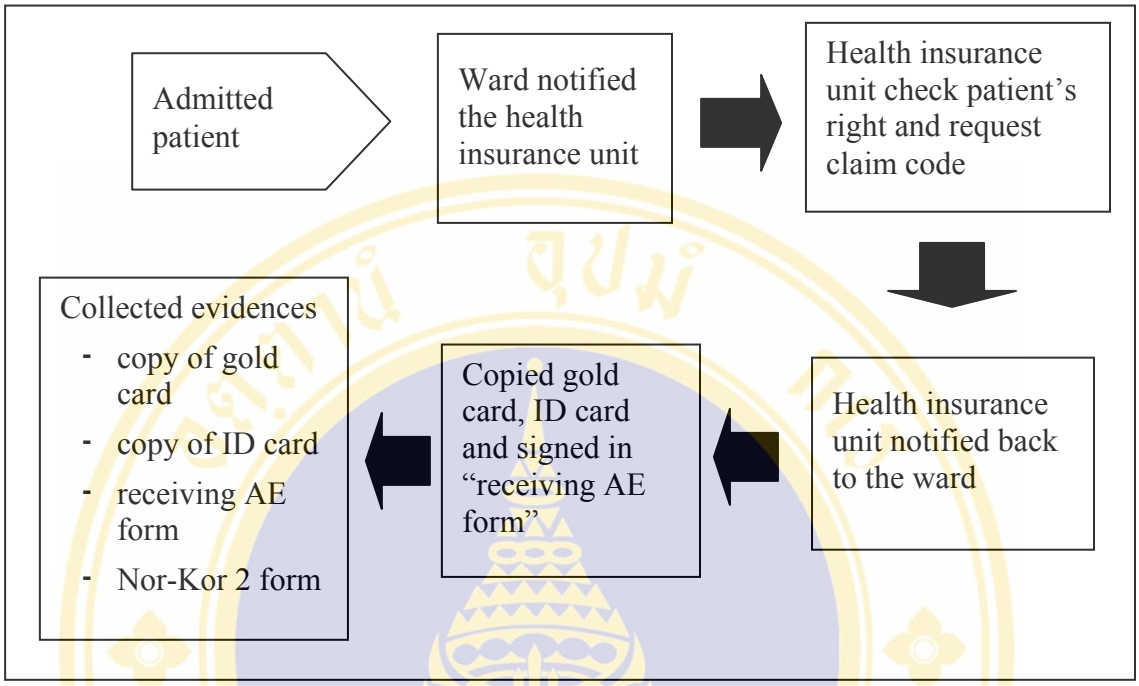


Figure 3 Flow chart of providing service for accident and emergency inpatients



According to the study, there were interesting details as follows.

- The methods of examination of the right of each hospital were different. Some hospitals required the patients / relatives to contact at Health Insurance Division. In some hospitals, the officers of Health Insurance Division would examine the right and follow up the documentary evidences from the patient at the patient ward. However, some hospitals filled the patient's data in the form of "Receiving medical expense reimbursement in case of accident and emergency" and sent to Health Insurance Division for examination and certification.

- Currently, NHSO had required the hospitals to send the claim data on reimbursement of medical expense in case of AE outside the registered province in the electronic form to NHSO without attaching any documentary evidences. However, the documentary evidences would be kept at the hospital for NHSO's examination on such reimbursement. (Previously data was sent in the documentary form and the attachment of documentary evidences was required.) The study found that some hospitals had cancelled the form of "Receiving medical expense reimbursement in case of accident and emergency" in order to reduce the procedures of completing the form and the number of documentary evidences which had to be maintained by the hospital.

Nevertheless, most of the hospitals were still required the patients to sign in form of "Receiving medical expense reimbursement in case of accident and emergency" as evidence.

- The duration for the hospital to send data to CHI under the specified criteria was within 30 days after discharge of patients. Most hospitals could send the data to CHI in time, but some hospitals couldn't. The causes of delay were load of data, delay of doctor's summary chart, and amendment of data.
- In the process of providing AE service from beginning until the end of the process, it was found that every procedure such as the examination of the right, gathering documentary evidences for reimbursement, and submission of data to NHSO had related to many relevant persons. Therefore, the cooperation was required from every related person including Health Insurance Division for examination of the right and requesting for the claim code, doctors who provided treatment and summarized the medical record of patients, nurses who had to record about symptom and medical treatment patients received, registration officers who had to code the disease by using ICD-10 and ICD9-CM, and finance division who had to calculate the medical expense. According to the data collection, the officers in several hospitals had well coordinated with each other. However, in some hospitals the coordination among various related officers did not work.

As for the use of the right of patients in case of AE outside the registered province, most of patients had no problem on health service utilization. They could use the right for health service. But some patients could not use their right because of the following causes.

- In case that the patients were diagnosed by the doctor as non-emergency, the patients could not use the right. Therefore, they had to pay by themselves.
- In case of car accident, the patients could not use the gold card, but they had to use the right under Traffic Accident Victim Protection Act first. The patient could use the gold card for the exceeding expense. If they lacked of any important documents or their cars did not have this insurance, they had to pay for their own medical expenses.

- In case of AE, if the patient lacked of some important documents such as no gold card and no identification card, some hospitals did not allow the patients to use the right and collect money from the patients instead.
- In case that the patients used the right in case of emergency outside the registered provinces exceeding twice a year, the patients could not use the right although their illness was as emergency case. (According to a regulation that gold card could be used only 2 times a year for emergency illness outside the registered provinces)
- In case that the patients brought the gold card for receiving service in case of AE, but when the hospital had checked the rights and found that the patient had duplicated right with other health insurance such as SSS or CSMBS. They could not use for the gold card.

According to the experience of providing service for the patients in case of AE outside the registered provinces, there were some problems as follows:

- For night shift, the copy machine was unavailable. Some hospitals solve this problem by writing the gold card number and identification card number of patient in the form of "Receiving medical expense reimbursement in case of accident-emergency" instead in order to record the reimbursement data to NHSO.
- In case that the patients used the right of AE but they had no the evidences for using the right or didn't bring any evidences or brought incomplete evidences such as no gold card, or bringing only the gold card but no identification card, or didn't bring either the gold card or identification card. In case of having only the gold card but no identification card, some hospitals solved this problem by requesting the patients to pay medical expense and could receive the money from the hospital if the evidences were completed.
- The patient brought the gold card of other person to use the service. Some hospitals solved this problem by examining the gold card with identification card or other card issued by the official with photo every time in order to confirm the correct person. If the name and identification number was not identical to the gold card, the patient could not use the right.
- Some patients had completely used the right in case of emergency for twice a year. In principle, the patients had to pay by themselves for the next time. Since

some hospitals did not examine the right of the patient after the official hour, they didn't know that this patient had already completed the use of right in case of emergency. Thus, the hospitals sometime could not reimburse the medical expense from the NHSO. They solved this problem by recording the service times of using the right in case of emergency outside the registered province in OPD card or the computer database such as 1st time and 2nd time as well as they explained to the patient about the right in case of emergency which could be used for twice a year.

- In case of providing service for AE patients outside the registered province and referring the patients to other hospitals that provided higher efficiency of medical service, the referring hospitals would have some problems on the evidence following up. Thus, the hospitals could not reimburse the medical expense from the NHSO.
- The mistake in the consideration of types of illness had occurred. For example, the patient came to the hospital in case of accident, but the hospital considered and reimbursed as emergency case which caused the patient to lose the right on using service for emergency outside the registered province. Therefore, the patient could use the right in case of emergency outside the registered province only one time.
- According to the NHSO's criteria, in case of providing service for AE patients and referring the patients to other hospital for continuous treatment at the same time, the referring hospital and the receiving hospital had to request for the claim code only one time and to use the same claim code in order to maintain the right of the patient in case of emergency outside the registered province. Since the request for the claim code in case of emergency outside the registered province could conduct only 2 times/ fiscal year. In practice, the request for the claim code was repeated for continuous treatment at the same time. Therefore, the patient had lost the right to use service in case of emergency outside the registered province for the next time. Some hospitals had solved this problem by identifying the claim code number in the referral document in case of referring the AE patient to other hospital.
- According to the NHSO's criteria, in case of providing service for AE patients and referring the patients to other hospital for continuous treatment at the same time, the referring hospital had to request for the claim code first and then the receiving hospital used such claim code. In practice, the hospital that provided service

to the patient in case of AE outside the registered province needed to urgently send the patient to other hospital that provided better medical treatment without requesting for the claim code. As a result, the referring hospital could not reimburse medical expense from the NHSO because the receiving hospital prior requested for the claim code causing the referring hospital unable to use such claim code.

3.3 Opinions of health care providers on accident and emergency service system under the Universal Coverage Scheme

Besides studying the management of service system for AE patients under the UCS, the research also included the opinion of hospital administrators and health care providers on AE service system under the UCS, especially on the conditions for using the rights in case of emergency illness. Additionally, this study related to the opinion on the change of provider payment method in case of AE under the UCS.

3.3.1 Opinions on the value of service system

When asked the opinion on the AE service system under the UCS, most respondents agreed that service system for patients in case of AE under the existing UCS was appropriate. They thought that this system was good for AE that could happen everywhere and the accident was inevitable. In addition, this system could protect and saved the patient's life who could encounter an accident or emergency illness outside the registered province. Previously, patients may die because they could not afford for the medical expense. The following expression could support the above reason.

> *"…The concept of this project was good because illness could occur anytime and anywhere…"*
>
> (Physician in community hospital)

> *"…I agreed with the emergency case. When there was an accident, we found only the patient's identification card. Although he had a gold card in other province, we sent him to CT scan because he was in coma. We had to save his life immediately. When we referred him, other hospital accepted the case. The gold card could save people's life. This project was good for emergency case. It saved people's life. I really agreed. If the patient showed enough evidence*

for searching in Internet, it would be good. In the past, this patient would die because he didn't have money…"

(Physician in community hospital)

"…It's good and it's more convenient for patients. We could not control the emergency accident. It would be O.k, if patients could get the medical service from the hospital other than they had registered in…"

(Nurse in community hospital)

"…It's good for emergency case because people could not avoid the accident which could happen everywhere. If they didn't have any card to show their rights, they would be in trouble because they had to pay by themselves. If the service included the emergency case, it would be great because it's convenient for the patients. The medical reimbursement could be made after that…"

(Nurse in community hospital)

"…The system for emergency accident was opened widely. Every patient was accepted, no matter which hospital was registered. We were O.k. at this point…"

(Nurse in community hospital)

"…This system was good because it opened for emergency case to get services at any hospital…"

(Nurse in community hospital)

3.3.2 Opinions on the reimbursement of accident and emergency care

Meanwhile, some respondents agreed that the service system for patients in case of AE under the existing UCS was not appropriate. The additional opinions consisted of several issues as follows:

- The reimbursement procedure from the NHSO was complicated. Many documentary evidences were required and the payment was always delayed. Therefore, it was not attractive for the hospital to make a reimbursement.

"…In the past, the delay of reimbursement and documentation system were problems. Therefore, this system did not attract the hospital to make a reimbursement. It's too late and difficult to do…"

(Director of community hospital)

- The reimbursement rate in case of AE of the Central fund given to the hospital was paid under DRG with global budget. This caused the hospital lose because the hospital received the compensation for medical expenses in case of AE less than the actual expense.

> *"…The reimbursement for accident was not equal to the reimbursed amount. It was cut and paid under the adjusted RW. The university hospital received the full reimbursement in the amount of 10,300 baht. The tertiary hospital could reimburse only 4,000 baht per RW. I didn't know why they (NHSO) didn't give me (tertiary hospital) as equal as the medical school. I also provided tertiary care as same as the medical school. If we (tertiary hospital) lost all the time, why we had to continue. If I (tertiary hospital) didn't want to do, we'd better refer to other hospitals, wouldn't we? Why didn't NHSO give us a hand? Why did they (NHSO) serve only the medical school? Why did they (NHSO) let the tertiary hospital in the region under the MoPH…"*
>
> (Director of regional hospital)

> *"…It was a global budget. The amount of payment was not as equal as actual expense. For example, the hospital reimbursed for 1,000 baht, but it returned only 70 or 80 baht. It didn't like social insurance. Sometime the reimbursement at the Central fund caused the hospital lose…"*
>
> *(Director of community hospital)*

3.3.3 Opinions on the referral system

- After having 30 baht Scheme, the patient referral system was controlled by payment. In case the patients could be cured but they were referred to other hospitals because if the hospitals cured by themselves, the hospitals would lose. This practice was different from that before 30 baht Scheme. At that time, the doctors had set a standard for referring the patients. They would not refer the patients if they could treat by themselves.

> *"…A person who decided to refer the patient would consider money first. They did not think about emergency condition. So this was not in accordance with clinical practice guideline. Before the UC, it had applied the clinical guideline. If the hospitals could cure these patients, they would not refer. Currently, the concept was changed. If the community hospitals continued curing the patients, they would get RW which was not over 2,000 baht. Therefore, most hospitals referred the patients to other hospitals. As a result, the patients were loaded at regional hospital…"*
>
> (Head of Health Insurance Division in regional hospital)

3.3.4 Opinions on the condition of service utilization in case of emergency for twice a year

When asked the opinion on the criteria determining the use of the rights in case of emergency for twice a year, the respondents had different opinions as follows:

- To use the rights in case of emergency outside the registered province for twice a year was suitable because if the patients had rights more than twice a year, they would not be active to take care of their own rights.

> *"…I thought it's enough. Actually, 30 baht project was operating at a loss. The more we gave the rights to patients, the more we lost. Per capita budget was not increased; therefore, this project was operating at a loss. NHSO continued offering the rights to patients, while they deducted some budgets for management. On the other hand, the budget the hospital received was not enough for management. The more we offered the rights, the more we lost…"*
>
> (Deputy director of general hospital)

> *"…Twice a year was proper. If we gave them more, the patients would not take care of their own rights. For example, we told them to move their rights to this area, but they neglected. If we gave them 5-6 times a year, they would not be active to protect their rights. I thought only twice a year for medical treatment outside the registered area was O.k…"*
>
> (Nurse in general hospital)

> *"…It's appropriate because they (patients) could use their rights when they had an accident while travelling. Only 2 times for emergency case was O.k. If we gave them more, the patients would use their rights all the time…"*
>
> (Nurse in community hospital)

- To use the rights in case of emergency for twice a year was not enough because it may limit access to care for the patients who needed to be treated. Some respondents also suggested that the rights in case of emergency should be set at least 4 times a year (every 3 month).

> *"…Twice a year was not enough because there were only few people who actually lived in the area. They travelled all the time. I thought it's not consistent if we gave a chance of emergency illness only twice a year…"*
>
> (Director of general hospital)

"…They travelled everyday, so twice a year was not enough…"
(Director of general hospital)

"…Twice a year was not enough. It should be 4 times a year or every quarter…"
(Head of Health Insurance Division in general hospital)

"…Twice a year was not enough for the emergency case. Emergency could often happen…"
(Head of Health Insurance Division in community hospital)

"…It's too little. Some people had personal disease. They may go to see the doctor more than twice a year. People would get trouble…"
(Nurse in regional hospital)

"…It's not enough for the emergency case. Some people may need to travel and could not stay in their area. Sometime they didn't want to move their census registration to other place. Sometime they wanted to stay here. When they got sick, they may use their rights for more than 2 times. They had to pay the medical expense by themselves. They were poor…"
(Nurse in community hospital)

"…It should be more than twice a year…"
(Nurse in community hospital)

- Limitation for using the rights in case of emergency should not be set because it was too much limitation for patients. The recommendation was to cancel the conditions determining for using the rights in case of emergency for not over twice a year.

"…It should be unlimited. In the view of emergency, we did not expect that it's going to happen. If it's true emergency case, we should give them the rights. If not, we would consider later…"
(Nurse in general hospital)

"…Only twice a year was too limited for the emergency case. It should consider on the benefit of patients. In case that they got sick, the hospital should give them the emergency case. If the emergency case was allowed for twice a year, it would separate which case was emergency and which case was not. The real emergency case should be unlimited…"
(Nurse in community hospital)

However, the NHSO should consider and review the advantage and disadvantage of criteria on the rights of patients outside the registered province in case

of emergency which was allowed for twice a year. This may affect access to care of the patients who needed to be cured and could not afford the medical expense. In addition, the NHSO should study the feasibility of cancellation for the conditions determining the rights in case of emergency for not over twice a year. The data would be used for decision making and adjustment of conditions on using the rights in case of emergency illness under the UCS in order to be suitable and more flexible on the benefit of all patients.

3.3.5 Opinions on the change of provider payment method for accident and emergency

In the fiscal year 2004, the NHSO had changed the provider payment method in case of AE by canceling the exiting criteria allowing medical reimbursement for only first 72 hours. The criteria were changed to reimburse all medical expenses from the NHSO and registered hospitals without paying the remaining expense. During the time of this study, a period of changing provider payment method in case of AE had passed. The researchers, therefore, studied the opinion of health care providers who were administrators and practitioners concerning the change of provider payment method in case of AE. After that, the effect on the change of provider payment method was evaluated.

According to the study of opinion concerning the change of provider payment method in case of AE by canceling the exiting criteria allowing medical reimbursement for only first 72 hours and changing to reimbursement of all medical expenses from the NHSO and registered hospitals without paying the remaining expense, there were some respondents who didn't know the payment method for AE outside the registered province before. Some respondents didn't know that the NHSO had cancelled the 72-hour criteria. However, after being informed in order to have the same understanding, all respondents agreed with the cancellation of 72-hour criteria. They thought that it was a better adjustment because in the past there were many problems in practical. For example, the hospital had to call the registered hospital for responsibility of the expense after 72 hours, so the registered hospital would not worry about the expense. The hospitals that provided services ensure that the medical

expenses could be collected from the NHSO. At the same time, the patients would get more convenient and could continue their medical treatment until the treatment ends without referring back to the registered hospital. In addition, the claim processing was more convenient. It could reduce the complication of the claim processing in the hospital because all medical expenses could be collected at the NHSO. Previously, the reimbursement was divided into 2 parts: 1st 72-hour expense being collected from the NHSO and the rest being collected from the registered hospital. Details from the interview were as follows:

> *"…It's good that we didn't have to care of 72-hour issue. We didn't have to ask the registered hospital whether the reimbursement could be made. If they (NHSO) paid us all, it's good because we didn't have to contact with another hospital…"*
>
> (Director of regional hospital)

> *"…This method was independent. Previously, we had reimbursed but the registered hospital didn't pay…"*
>
> (Deputy director of general hospital)

> *"…It's better because it could solve the problem of payment. Sometime the expense exceeded the payment capability of the registered hospital…"*
>
> (Director of community hospital)

> *"…It was good for us to take care of the patients continuously, while the patients were more comfortable. The patients would feel good that they didn't need to be referred back to the registered hospital after 72 hours. It looked like we had discriminated among the patient…"*
>
> (Director of community hospital)

> *"…The cancellation of 72-hour payment was good because we had to contact with another hospital. They (registered hospital) may claim that they didn't see the patients. The problem on medical expense calculation showed the different opinion and caused the difficult management. If we directly contacted with the NHSO, it would more convenient…"*
>
> (Director of community hospital)

> *"…It's good because after 72 hours, the hospital would refuse that they hadn't been informed yet. This could avoid any dispute and collection problem on medical expense…"*
>
> (Head of Health Insurance Division in regional hospital)

"…Patients would not be in trouble. Some hospitals were pressured that the reimbursement period was over. We could not expect the registered hospital to pay for us…"

(Head of Health Insurance Division in community hospital)

"…It was more convenient for patients. We could cure them with full capacity. And it's also convenient for us not to be in trouble after that…"

(Physician in community hospital)

"…It was good for service user. The service provider would not care about 72 hours. The separated reimbursement was not convenient. Only one place for reimbursement should be O.k…"

(Nurse in community hospital)

"…It was good for patients to not worry about the expense. It could reduce the procedure of notification. It was better to let the NHSO be responsible for emergency and accident…"

(Nurse in community hospital)

"…It was good for patients. The patients would not worry about medical expenses. They would be worried if we referred them back to the registered hospital. Their relatives wanted the patients to get recovery, so they were willing to pay by themselves…"

(Nurse in community hospital)

"…It was good for practitioner who didn't have to worry about the 72 hours. They didn't have to coordinate with the registered hospital which was a difficult process…"

(Nurse in community hospital)

"…It was an advantage for patients. The patients could continue admitting in the hospital and the treatment was continued. In addition, it was convenient for patients to treat here…"

(Nurse in community hospital)

"…In the past, when we called the registered hospitals, they would refuse to pay. This payment method was better. We didn't have to waste our time on coordination with the registered hospital. We could take care of the patients with the full capacity. We ensured that we could reimburse from the NHSO…"

(Nurse in community hospital)

"…I thought it was an advantage of patients. We didn't have to worry about 72 hours. We didn't want to refer the patients, but we wanted them (patients) to get recovery…"

(Nurse in community hospital)

"…It benefited to patients and it was good for service users and hospitals that provided…"

(Nurse in community hospital)

3.4 Knowledge and understanding on the use of right in case of accident and emergency under the Universal Coverage Scheme

According to the interviews with health care providers on the use of patients' right in case of AE under the UCS, the result revealed that most of health care providers had accurate knowledge and understanding about the right for utilizing services of the patients in case of AE under the UCS. For instance, they knew that in general illness, the patient had to utilize service at hospital as indicated in the gold card. In case of AE, the patient could go for medical care at any nearest hospital that participated in this scheme. In case of general accident, the patient could use the gold card. However, in case of car accident, the patient had to use the right under the Traffic Accident Victim Protection Act before utilizing the gold card and the gold card could be used when there was remaining medical expense. The patient could get a medical service outside the registered province not more than twice a year in case of emergency illness and unlimited time in case of accident. The followings were details from interviewing.

"…Dog bite or appendicitis shall be classified as emergency case. Every patient from car accident could not use the gold card, but could get their right under the Traffic Accident Victim Protection Act. I understand that the patients could use the rights at their registry hospitals. In case of emergency, the patients could get services at any hospital that participate in the 30-baht project for twice a year…"

(Physician in regional hospital)

"…In case of accident, the patient could receive service at the nearest public hospital. In case of emergency that needed to be cured urgently, the patient could receive service at the nearest hospital immediately…"

(Physician in regional hospital)

"…In case of general illness, the patient had to utilize gold card in the registry hospital. But in case of emergency, the patient may use it outside the registered hospital…"

(Physician in community hospital)

"…In case of emergency, people who had a gold card with UC exempted co-payment or without co-payment could get services at any public hospital. However, in case of non-emergency, the patient may pay by himself…"

(Nurse in regional hospital)

"…For general illness, the patient shall use the service at hospital as indicated in the gold card. In case of emergency and accident, the patient could use his right in other province, but shall not exceed 2 times a year…"

(Nurse in regional hospital)

"…The gold card could be used in the hospital as indicated in the gold card. In case of accident, the gold card could not be used. For the accident that occurred across the province would be used under the Traffic Accident Victim Protection Act in the limit of 15,000 baht, exceed expense could be used under gold card. In case of crossing the area, the gold card could be used twice a year…"

(Nurse in regional hospital)

"…The patient had gold card that belonged to a community hospital had to use service at that community hospital first in case of non-emergency. In case of accident, the patient could get service at any hospital in order to use his right primarily 15,000 baht by Traffic Accident Victim Protection Act. If the compensation of 15,000 baht were run out, the gold card could be used. Gold card could be used for emergency illness twice a year…"

(Nurse in general hospital)

"…In case of general illness or OPD case, not emergency, the patient had to pay by himself. Whenever the patient was admitted, it was classified as emergency case. So the patient could use the gold card whether he was in other province or district. However, if he was in other province, the claim code could be request only twice a year…"

(Nurse in community hospital)

"…If the patient used his right in the registered area, we could provide him medical service at every time he came. However, if the patient used his right outside the registered area, we would consider whether the case was emergency. This would not be used more than twice a year in case of emergency. But in case of car accident, the gold card could not be used…"

(Nurse in community hospital)

"…If the patient was in the registered area, he could use his right all the time. If the patient were outside the registered area, the use of the right outside the registered province would not exceed twice a year. There was no problem in case of the different district within the same province, while the cross-border usage would be twice a year. The patient who was admitted in the hospital was classified as emergency case. He could use the gold card as the right indicated…"

(Nurse in community hospital)

"…Normally the patient used his right in the hospital as indicated in the gold card. Except the case of emergency and accident, the patient could use his right outside the registered area only twice a year…"

(Nurse in community hospital)

"…The gold card could be used for two cases; within and outside its registered province. To use the gold card at the registered hospital was eligible. Only accident and emergency case could be used outside the registered province, unlimited time for accident and twice a year for emergency case…"

(Nurse in community hospital)

However, the research result revealed that some health care providers did not know the details of the right and condition on using such service in case of AE under the UCS. For example, they didn't know that how many times the patient could use the right for emergency outside the registered province or they only knew that the right in case of emergency could be used twice a year, but they didn't know twice a calendar year (January-December) or fiscal year (October-September), or they misunderstood that to use the right for twice a year was included accident and emergency cases. The followings could support the above mentioned.

"…I didn't know. My responsibility was only to provide patient a treatment…"

(Physician in regional hospital)

"…I thought that about 2-3 times, but not over 3 times…"

(Physician in community hospital)

"…Twice a year, I was not sure whether it was fiscal year…"

(Nurse in community hospital)

The study showed that although most of health care providers correctly understood the right for using service of the patient in case of AE under the UCS, some of them didn't know or misunderstood the details of the right and condition on using such service in case of AE under the UCS. At this point, the health care providers had to be informed for correct understanding. The misunderstanding of the heath care providers on the privilege of patients may affect directly the accessibility of patient and the complaints may be followed afterward.

3.5 Criteria and guideline for considering accident and emergency

The National Health Security Office (NHSO) gave the definition of accident and emergency. The term "accident" was defined as an injury which caused from an external event and occurred unexpectedly. The term "emergency" was defined as disease or symptom that was serious and urgent need for treatment, otherwise may result in life-threatening or harmful to the other, including the disease that urgent need for surgical operation, otherwise may result in life-threatening. Besides, the items to be considered were blood pressure, pulse, symptom of disease, diagnosis, guideline for treatment, and urgent need for treatment.

When considering the criteria of NHSO mentioned above, there was no problem on the case of accident because the definition was clear. Meanwhile, there were some problems on the case of emergency illness on which case or how serious of illness would be called as emergency case. In practice, each hospital followed the criteria strictly and flexible differently which depended on the discretion of doctor of each hospital. However, information from interviews with several doctors at regional hospitals, general hospitals, and community hospitals concerning the criteria and guideline for consideration of AE, it was found that most doctors similarly followed such criteria and guideline for consideration of AE. Details were following.

> *"…If we (doctor) didn't help the patient, he would die or the patient who had an accident and was admitted in the hospital, it would be considered as emergency case. However, if the patient intentionally came here (non-registered hospital) in order to use his right, it could not be emergency case. I considered the necessity of patients. In case of dog bite, it was an accident that we could not know when it would happen, we allowed the patient in this case to use his right as emergency case …"*
>
> (Physician in regional hospital)

> *"…I (doctor) considered patients' symptom whether the patient had to be urgently treated or not. If the patient was admitted in the hospital, I would consider this case as emergency. In OPD case, the patient who had high fever and was exhausted would be also considered as emergency case. If the patient had fever like having a cold, it would not be considered as emergency case. In case of acute diarrhea, it was considered as emergency, including asthma which had to be treated immediately…"*
>
> (Physician in regional hospital)

"…Most of emergency cases always were dog bite. During the transportation, if a patient had an accident or dog bite, and this hospital was the nearest one, I (doctor) allowed the patient to use gold card as emergency case. If a patient had fever, severe stomachache, or asthma, I would consider that such patient was in an emergency case on case by case basis…"

(Physician in community hospital)

"…I (doctor) considered patients' symptom. For example, stomachache could be considered as both emergency and non-emergency case. If a patient had simple stomachache or diarrhea without seriousness, it would be considered as non-emergency case. However, if a patient had severe stomachache such as appendicitis, such patient urgently needed to be treated, it would be considered as emergency case. I considered the symptom and also used my feeling to make a judgment. I felt that if the patient was not treated immediately, it would affect the patient. In some cases such as common cold, the treatment period could be extended, it was considered as non-emergency…"

(Physician in community hospital)

"…An emergency case was an unpredictable case. Assumed that the symptom just occurred during the transportation to visit his hometown, I (doctor) allowed this patient to be in an emergency case. But if this patient who had a fever lived in this area permanently, I would not consider this case as emergency. For an accident case, it was covered by the Traffic Accident Victim Protection Act…"

(Physician in community hospital)

"…For an accident case, I (doctor) considered about how serious of that case. In case that the patient had an unserious injury from nail or knife, although he was from the northern or northeastern part, I would not allow the patient to use the right of gold card even though the patient asked for using the right for this time. The patient had to pay by himself. In case the patient used respiratory tube and was unconscious, I would provide him medical treatment. As for the waiting cases but it seemed to be serious symptom such as broken leg, and broken bone, I would provide basic treatment for reduction of painfulness. After that I would advise the patient to use the right of a gold card at his registered province. Most of emergency cases were the medicine cases. The consideration was based on vital sign. In case that blood pressure was declined and was unable to measure, or irregular pulse, or high fever, I would consider such case with unstable vital sign was an emergency. This case needed to be treated before referring to the hospital he registered. Therefore, the first criteria to be considered was vital sign, followed by the case that was not an emergency but occurred during patient's journey. If the patient just visited here and had diarrhea, I allowed the patient in this case to use his right as emergency case…"

(Physician in community hospital)

"…There was no problem in case of accident because every case, both minor and major accident, was considered as emergency. In case of emergency

illness such as high fever, bleeding (which was not result from accident, bleeding in the stomach), asthma, exhaustion, irregular vital sign, I (doctor) would considered as emergency case. I would mostly consider based on the criteria of MoPH. If I saw the patient was in bad condition such as severe stomachache, nausea and vomiting, I sometimes gave a relaxation to the severe patient because the patient needed to be treated…"

(Physician in community hospital)

"…We (doctor) followed some parts of criteria, not all parts because in fact it was impractical. We considered on case by case basis. However, there were many problems because the scope of "emergency" in the view of doctors and patients was different…"

(Physician in community hospital)

As mentioned above reflected that most of doctors would consider the emergency illness based on the disease and symptom of patients. In addition, the doctors would evaluate how seriousness or urgency of treatment was. If the illness was not serious such as fever, common cold or other non urgent symptoms, it would not be considered as emergency case. On the other hand, if the illness was serious or suddenly occurred such as accident, dog bite, faint, shock, high fever, vomiting, acute diarrhea, exhaustion, chest pain, asthma, bleeding, appendicitis, severe injured patient, patient with unconsciousness and using respiratory tube, patient with urgent need for operation, and hospitalized illness, the mentioned symptoms were considered as emergency case. The emergency case urgently needed to be treated from doctor. If not, it would harm the patient's life. Furthermore, some doctors informed that they considered whether the case was emergency based on vital sign and other factors such as age of patients (in case of children or elderly, the doctor would allow to use the right as emergency case because they had a chance to be serious illness and to cause of death more than labor-age group), convenience and necessity of patients (in case patients could not go back to the hospital as indicated in the gold card, they were allowed to use the right in case of emergency).

Like the case of childbirth delivery, the doctor would ask illness history of patient and consider on case by case basis whether this case was considered as emergency or not. If the doctor considered that it was an emergency childbirth delivery or it needed to be admitted in the hospital such as premature labor pain, fluid flow, and inactive child, it would be considered as emergency case and could use the

right. However, if the patient intentionally came to the non-registered hospital for childbirth delivery or antenatal care at the hospital which did not indicate in the gold card, it would be considered as non-emergency case. The followings were details from interviewing.

> *"…I (doctor) would ask for the history first. If the patient needed a childbirth delivery, this case would be considered as emergency. But if the patient intentionally came here (non-registered hospital) for a childbirth delivery, it was not considered as emergency case. If the patient visited this province and she urgently delivered a child, it was considered as emergency. If the patient came from other province or other hospital for childbirth delivery, it was not considered as emergency…"*
>
> (Physician in regional hospital)

> *"…I (doctor) considered the distance they came and where they live. In case the patient registered in other area but the event was occurred here and he couldn't go to the registered hospital, I would consider that this case was emergency. If the event was occurred near the registered hospital, but the patient didn't go to her registered hospital and came to receive treatment here instead, I would not consider that this case was emergency. In case of childbirth delivery, the patient had to pass her registered hospital on the way to this hospital but she didn't get in, this case was not considered as emergency…"*
>
> (Physician in community hospital)

> *"…If the patient was from other area but she had labor pain and baby did not response, I (doctor) considered this case as emergency…"*
>
> (Physician in community hospital)

Besides, the study found the interesting issue that some hospitals did not consider emergency illness based only on medical indications, but they also considered in the view or perception of patients against their symptoms based on humanitarian reasons. In some hospitals, the hospital director had a relaxation policy in order to avoid any complaints from patients. Sometime the patient asked for using the right as emergency case, although his illness was not emergency case. The hospital had to allow the patient to use his right for emergency because they didn't want to dissatisfy the patient or be claimed afterward. The details from interviewing were as follows:

"…According to our policy, the hospital director gave guidelines for considering emergency case. For example, if the kid had a convulsion, in patient's point of view, it was emergency case. However, when the doctor diagnosed that it was not an emergency case and collected money from the patient, there would be a conflict between the hospital and the patient. As a result, there would be many complaints. In addition, the patients came to the hospital at night or thought that they were in emergency case, they were considered as emergency case…"

(Nurse in community hospital)

"…The hospital director gave a policy on which case was emergency should be considered under the ordinary person's view because if the patient thought that his case was emergency, while the doctor or nurse thought that it was not, there would finally be an argument and complaint. If the patient thought that it was emergency, we should follow them under the ordinary person's view in order to avoid any complaints. Actually, the patient wouldn't listen to us, he only thought that his case was emergency. Therefore, the hospital director suggested us to consider under the ordinary person's view. It did not work if we considered under the doctor's view and there would be many complaints…"

(Nurse in community hospital)

For the consideration of emergency case, the study indicated that most of hospitals generally allowed doctors to consider in case of emergency condition only. However, some hospitals allowed the health insurance officers or nurses at the emergency room or at inpatient ward to consider the use of emergency right for a clear case. If there was a problem or they were not sure, they could consult with the doctor and the doctor would consider on case by case basis. The details from interviewing were as follow:

"…In case of emergency such as asthma, sometimes I (nurse) didn't consult with the doctor. The doctor would make a decision, if I was unsure. The system would be like this. If the patient had severe asthma, I could consider that this case was emergency. If in case of unsure like stomachache, I would let the doctor consider…"

(Nurse in community hospital)

"…If the symptom was clear, I (nurse) could consider as emergency case. I sometime didn't tell the doctor because I could reimburse under our system. But if it was not clear whether it was emergency case or not, the doctor would make a consideration…"

(Nurse in community hospital)

According to Section 7 of the National Health Security Act 2002, it generated many problems. After the NHSO issued regulations regarding the use of health service from other hospital for reasonable case, accident case, or emergency case B.E. 2548 (2005), many hospitals got confused and frequently received questions from the heath care providers in several hospitals on the definition of ***"be reasonable case"***.

> *"…The definition of "emergency" and **"reasonable case"** were ambiguous words causing problems. The latest one was **"reasonable case"** which I (doctor) didn't know whose reasonable case was. I thought that the reasonable case should be a subset of "emergency case". However, emergency illness shall be considered under the reasonable case. If asked the hospital, I didn't consider 100% of emergency case…"*
>
> (Physician in community hospital)

According to the above data, the hospitals mostly considered AE under the criteria specified by the NHSO. They would consider emergency illness based on the seriousness of symptoms or illness including necessity of treatment. Sometimes the hospital relaxed for the patients regarding other factors such as vital sign, age, convenience and necessity of patients. On the other hand, some hospitals may consider the emergency illness in the view or perception of patients against their illness. In addition, they considered under humanitarian reasons and may relax for some patients who asked for using their right, although the symptom was not emergency case in order to avoid any complaints.

3.6 Factors that caused differences of claim data submission on medical reimbursement in case of accident and emergency in the study area

According to the interviews with hospital administrators and health care providers of regional hospitals, general hospitals, and community hospitals, the significant causes of differences on each hospital's claim data submission for medical reimbursement in case of AE consisted of several factors as follows:

3.6.1 Non-registered people and their families

Non-registered people and their families were significant causes of differences of claim data submission on medical reimbursement in case of AE in each hospital. The study found that most of hospitals where submitted a large amount of claim data on medical reimbursement in case of AE were located in industrial area. There were many people from other provinces migrating into these areas in order to work both temporarily and permanently. Most of them worked as employees or constructing workers. Some people followed their families such as children following their parents. Without moving their census registration into the area or without changing the registered hospital in their living area, it caused this group of people having no rights to be treated in the area. When these people got sick or needed to get medical service, they would be as AE patients. The details from the interview were as follow:

"…People who were contractors for building road have possessed a gold card. They may live in other area, but they worked here. Sometime they worked as employee. However, they haven't moved to this area…"

(Head of Health Insurance Division in regional hospital)

"…There were many strangers here. Some were from the northeastern part. They worked as employee and haven't moved their census registration yet…"

(Director of regional hospital)

"…For factors, I thought there were many non-registered people. I meant the migrating people…"

(Director of community hospital)

"…Because (name of province) was a province of migration; therefore, there were many non-registered people. In some cases, people have moved to work here, but they haven't got the rights of social insurance because it took 3 months to get such rights. Therefore, they used the gold card instead, especially children who were on vacation and came to meet their parents who working here. The factor was a number of non-registered people. Some people were fishermen and some were from other places…"

(Physician in regional hospital)

"…It's like opened or closed city. There were many factories. In the working season, people who were from the northeastern part came to work here and brought their children with them. At (name of district), the housing allotment project was constructed everyday. This city looked like an economic city. People were rotated. Some people worked in the construction area, factory, sugarcane plantation, and housing allotment project…"

(Physician in community hospital)

"…Most of them were not in this area because this province was a hub of industry. There were many jobs here. People who lived here have moved their domicile and worked as employee here. Some were tricycle drivers. I thought these people haven't moved their census registration…"

(Nurse in regional hospital)

"…Because this province was a city of industry. There were many people from other provinces working here. Although they worked here temporarily, they lived here for years. They did not move their census registration from their province to here…"

(Nurse in general hospital)

"…Maybe the factory has provided many jobs for many rural people to work here. Some people who worked in the factory did not have social insurance. They were daily workers who haven't in a permanent position. Some were merchants, workers, or employees. There were many people working here…"

(Nurse in general hospital)

"…Most of children followed their parents or some children whose mother worked in Bangkok came here to live with their grandparents. However, the registered hospital for medical service was registered in their resident province…"

(Nurse in community hospital)

On the other hand, the reason that the hospitals submitting a few claim data on medical reimbursement in case of AE was that there were few people who migrated from other provinces to work in the area. Therefore, the reimbursement in case of AE was not much. Details from the interview were as follows:

"…There were a few people from other provinces working here. So there were less patients who made a medical reimbursement across the area. Most of labors here were from Laos…"

(Deputy director of general hospital)

"…(Name of district) was a small town, so people who were from other provinces were not much. There were many factories here. Most of people who worked in the factories had social insurance. So there were less people from other area who utilized medical service. Most of patients who were not resident had social insurance, not gold card…"

(Director of community hospital)

3.6.2 Being tourist attractions or educational centers including transportation route

The study indicated that most hospitals sending a large amount of claim data on medical reimbursement in case of AE were located in the tourist attraction areas or in the educational centers, including transportation route of each area which was the main road passing many provinces. This caused people from other provinces traveling to these areas. Or there were many students studying in these areas or passing these areas all the time or going back to their domicile. When having accident or getting sick, they needed to receive the medical treatment outside the area where they had registered. The details were as follows:

> *"…It's possible that this area was a tourist attraction. In urgent case, they would come here. (Name of province) was tourist attractions. People liked to visit (name of tourist attraction) or wherever around here. So, there were many tourists. In case of urgent sickness, it's possible to come here for medical treatment…"*
>
> (Director of regional hospital)

> *"…Patients from other provinces were tourists. There were many urgent cases. They may get sick while they were on tour…"*
>
> (Head of Health Insurance Division in regional hospital)

> *"…It was a big city and tourist attractions. In addition, people would pass this province when going to see the rocket festival. Therefore, it was crowded in the big city. In addition, this was a city to the educational center…"*
>
> (Head of Health Insurance Division in regional hospital)

> *"…Sometime tourists visited here once a year and got sick here…"*
>
> (Nurse in regional hospital)

> *"…Because (name of province) was a city of education. People, from Chiangmai and Lumphun, studied here. The accident could happen as well…"*
>
> (Nurse in regional hospital)

In contrast, the reason that the hospitals submitting a few claim data on medical reimbursement in case of AE were that the province was small and located in boundary area including traveling to hospital was inconvenient. Details from the interview were as follows:

"…We submitted a few reimbursement data across the registered provinces because patients who used the gold card from other area were not much. This area may be near a boundary. Tourists only visited here for one day. There were only a few tourists staying overnight…"

(Deputy director of general hospital)

"…Maybe this hospital was very far. The transportation was inconvenient and there was no bus passing this district. The hospital was located in the hill. Tourists rarely visited here. So the case was not much, except they visited their relatives. In addition, there was no accident, only non-violent one from motorcycle…"

(Physician in community hospital)

3.6.3 Efficiency of system on medical expense collection in case of accident and emergency of each hospital

Each hospital provided the different efficiency of system for medical expense collection in case of AE across the registered provinces. The observation showed that the hospitals where submitted the reimbursement data in case of AE in the large amount mostly provided the strong and efficient management system on medical expense collection in case of AE. In addition, they had more experience on the collection of medical service charge, which could collect the medical expense completely and in time.

"…We examined all the time. We tried to check and follow up. Our policy on reimbursement of medical expense from insurance company, social insurance, or 30 baht universal coverage policy, was to reimburse completely and in time. Our policy was to complete and to examine every reimbursement…"

(Director of regional hospital)

Meanwhile some hospitals didn't have the clear management system for submission claim data on medical reimbursement in case of AE because the hospital structure was separated individually and the responsibility was also divided into several units. There was no main unit responsible on this issue which caused the lack of connection and vision of system in overview. This may cause the reimbursement data submission incomplete or not in time. The hospitals where submitted a few claim data on medical reimbursement in case of AE gave the supporting reasons as follows:

"…I thought the internal system, I meant the responsible persons were not united. It didn't like an one-stop service. In my part, I audited the chart and the registration unit provided DRG and sent to the financial unit who summarized the amount of reimbursement and collected money. No one managed all processes and no one was directly responsible. There was no center of health insurance and no supervision system…"

(Head of Health Insurance Division in community hospital)

"…Our collection system did not cover all things. So there were many mistakes occurring…"

(Head of Health Insurance Division in community hospital)

3.6.4 Characteristics of emergency illness in each area

A big hospital where submitted a few medical reimbursement data in case of AE gave its reason that the hospital was located in the area where the statistics on traffic accident was high. Therefore, the patients who were admitted in the hospital in case of AE were mainly injured from car accident. According to criteria on using the rights under Traffic Accident Victim Protection Act, the hospital had to collect the medical expense from the compensation fund. Details from the interview were as follows:

"…When the accident occurred such as car accident, the injured would comply with the Traffic Accident Victim Protection Act…"

(Nurse in regional hospital)

3.6.5 High cost patients from accident and emergency

A big hospital where submitted a few medical reimbursement data in case of AE stated that because the hospital where was efficient and capacity for medical treatment as well as was referral centers of the province caused patients be referred from neighboring hospitals. In addition, most of patients in case of AE got severe illness. Therefore, the cost of medical treatment for AE case was high. After the analysis of DRG, the patients who got DRG relative weight 4 or over (RW $\geq$ 4) were high cost patients according to the criteria specified by the NHSO. Therefore, these patients were reimbursed their medical expense in the group of high cost care instead of being reimbursed in case of AE. The details were as follows:

"…It's possible to be in high cost group. Previously, there were 9 diseases in the group of high cost, regardless the RW. Thus, there were many urgent cases and high cost cases. When RW was higher than 3, it was changed to more than 4 and 9 diseases being in high cost. Patients from Chaiyaphum, Burirum, and Surin were sent to this hospital, mostly were in severe cases and in high cost group…"

(Head of Health Insurance Division in regional hospital)

3.6.6 System for examining the rights in each hospital

The study showed that the limitation of the system for examining the rights in the hospital caused each hospital differently submitting claim data on medical reimbursement in case of AE. The hospitals where less submitted the medical reimbursement data in case of AE indicated that the examination system was not good enough. According to the statement, many patients were thought as patients within the registered province. When receiving the statement, it found that the result of examination showed that they were from other province. In this case, the medical expense shall be collected at the NHSO. Sometime, the rights could not be examined after official hours. Therefore, the medical expense in case of AE outside the registered province sometimes could not be collected from the NHSO. Some hospitals did not allow patients to use their rights for emergency illness after the official hours and collected money from the patients instead. Finally, the reimbursement data was not submitted to the NHSO.

3.6.7 Criteria on consideration of accident and emergency of each hospital

Although every hospital used the criteria as specified by the NHSO for consideration of AE. However, in practice, some hospitals followed the criteria strictly while some hospitals were more relaxed depending on the discretion of doctors in each hospital. Therefore, the claim data submission on the reimbursement of medical expense in case of AE of each hospital was different. The hospitals where less submitted the medical reimbursement data in case of AE indicated that the hospital would strictly consider the reimbursement for AE under the criteria specified by the NHSO. The reimbursement data was submitted to the NHSO only the case of AE without making any data in order to comply with the criteria that could reimburse the

medical expense at the Central fund. The followings were interview concerning this issue.

> *"…We used the criteria of NHSO in our operation. What he (NHSO) ordered us to reimburse, we followed them. We could not do it independently. We reimbursed the medical expense based on the actual reason. If it was not the AE case to reimburse, we would not reimburse…"*
>
> (Deputy director of general hospital)

> *"…We only focused on the emergency case. Some hospitals where didn't have emergency made the reimbursement for earning the income. In our hospital, we do only actual emergency case. Sometime, a patient who has gotten a stomachache for 3 days. This case was not urgent…"*
>
> (Head of Health Insurance Division in community hospital)

> *"…(Name of hospital) only took the emergency case. However, in technical, the patients were reimbursed as emergency case. At our hospital, we reimbursed only for the emergency case…"*
>
> (Head of Health Insurance Division in community hospital)

On the other hand, the hospital where submitted higher medical reimbursement data in case of AE indicated that the hospital provided the criteria for consideration of AE to be more flexible than the other hospitals without strictly considering under the criteria of NHSO. Refer to the following interview.

> *"…Here, the emergency case may be seen more easily than other hospitals…"*
>
> *(Head of Health Insurance Division in community hospital)*

In addition, the director of a community hospital informed that it was highly possible that some hospitals would diagnose the illness more severely than the actual illness in order to comply with the emergency criteria that could reimburse the medical expense. Refer to the following interview.

> *"…I have seen a neighboring hospital report the non-emergency case of a patient that this patient has vomited for more than 15 times and has diarrhea. The handwriting was indicated that the director himself additionally wrote that this patient has vomited for 15 times. However, this was a small case so we neglected it. We could report that this case was an emergency because no one came to check us…"*
>
> (Director of community hospital)

According to the data analysis, it could summarize that the significant causes of differences on each hospital's submission of medical reimbursement data in case of AE consisted of several factors, including non-registered people and their families, being tourist attractions or educational center and transportation route, efficiency of system on medical expense collection in case of AE of each hospital, characteristics of emergency illness in each area, high cost patients from AE, system for examining the rights of each hospital, and criteria on consideration of AE of each hospital. Each hospital depended on different factors.

3.7 Problems and obstacles in providing service to accident and emergency patients under the Universal Coverage Scheme

Information from interviews with hospital administrators and health care providers could be concluded on the problems and obstacles in providing service to the patients in case of AE under the UCS as follows:

3.7.1 Problems on policy, rules and regulations

- Problems on rules, regulations and guidelines were still lacking clarity and constantly change. This made staff became confused in performing work and could not adjust themselves to these changes such as the condition of how to use rights, the program for recording data.

> *"…Various rules often changed. Some of them looked good but could not be practical. Any thing if done by considering the benefits of patients would be very good, but Thai people were not like that. The hospital had a lot of work to do. Every thing that has been introduced increase work of the staff…"*
>
> (Deputy director of general hospital)

> *"…Various programs, E-claim, and others, the program was still being swing. When this program has been introduced, the workers would have to adjust themselves to the new program…"*
>
> (Head of Health Insurance Division in general hospital)

> *"…Sometimes, rules and regulations came and went very quickly. Some staff were confused that which one was new or old. Rules and regulations were stipulated too frequent…"*
>
> (Officer of registration unit in community hospital)

- Problems on charging for medical expense from the Central fund in providing AE patients utilizing service outside the registered provinces, the procedures were complicated. This made the hospital have to send data of patients in order to claim within the specified period. Some hospitals could not send claim data in time. In addition, reimbursement from the Central fund was too late since there had to be check for accuracy of using right at the Central administration. This made the hospital lack financial active condition and it was the limitation in providing service.

> *"…The reimbursement system may take a lot of procedures. If they were done sooner, it would be very good…"*
>
> (Nurse in regional hospital)

- Problems on the coordination between areas and various agencies concerned such as the community hospital and the general/regional hospital. Furthermore, the problem was that there were too many rules and regulations for performing work and it was different in each province such as patient referral system. This made it necessary to remember the forms of each province. The large hospital would have a lot of problems because it could not follow up the documents comprehensively. This made the reimbursement of medical expense could not be made in full.

> *"…The rules of 76 provinces consisted of 76 forms. Why NHSO had no authority in managing system in that the referral system should be only single system…"*
>
> (Head of Health Insurance Division in regional hospital)

3.7.2 Problems on health personnel

- Problems on lacking health personnel: Every hospital has provided corresponding data about the insufficiency of personnel. In some hospitals, the personnel lacked knowledge and skill in computer program. Some hospitals had few doctors; most of them were funded and just graduated; when they worked for just a while, they moved. This made them lack understanding about rules and regulations. However, several hospitals have tried to solve this problem by organizing meetings with

health staff to inform them of procedures for performing work to work continuously.

3.7.3 Problems on medical equipments

- Problems on medical equipments: Some hospitals still lacked the necessary medical instruments. Some hospitals had old and inefficient medical instruments. Some hospitals lacked vehicle for referring the patients. This may be partly because of insufficient budget. Many hospitals have tried to solve this problem by purchasing the really necessary medical instruments in place of the old ones.

3.7.4 Problems on service system

- Problems on definitions and understanding: The meaning of "emergency illness" did not correspond to the meaning between the service users and service providers. This created conflict between the service users and service providers and led to complaint.

> *"…About the emergency, the health personnel and the people thought differently. This caused problems so many times. People thought some cases were emergency but the doctor did not think like that. This led to complaint. The term "emergency" was very wide in meaning depending on the attitude of doctors or people…"*
>
> (Director of regional hospital)

> *"…The term "emergency" between the doctor and the patient was different. Sometimes, the patient did not understand the meaning of emergency. They thought that some cases were emergency, but doctor did not think so. This problem was the different understanding…"*
>
> (Deputy director of general hospital)

> *"…Sometimes, it was difficult to tell what was emergency or what was not emergency. Sometimes, the patients thought that it was emergency then they had problem with the staff. They complained about their illness like "I felt a lot of pain, I was going to die" …"*
>
> (Physician in community hospital)

> *"…It was about the different understanding. The hospital told that this was not emergency case and could be waited, but that one was the emergency case under the opinion of the patient…"*
>
> (Physician in community hospital)

"…It depended on the patients that they did not understand the word "emergency" under the medical meaning…"

(Nurse in community hospital)

"…Most of the patients felt that they should be placed in emergency but when they were not placed so, they would feel that their symptoms became worse after a few days of illness. The hospital told that 3 days have passed then this was not emergency case, but the patients would disagree and say that they should be placed in emergency case…"

(Nurse in community hospital)

"…Their considerations about the emergency were different from those of hospital. Sometime they visited their relatives and got sick here. They thought that it was emergency. The different meaning of "emergency" between the doctor and the patient was the key problem…"

(Nurse in community hospital)

3.7.5 Problems on information system

- Problems on the accuracy and being current of the beneficiaries database: the database that was not current and there were mistakes about the right of the patients because the right of being treated changed all the times; this would affect the beneficiaries database.

"…The right that did not correspond to the patient who held the card. They found that they have no right because the data was not updated in time. It was hard to explain to them as it was not their faults…"

(Nurse in community hospital)

- Problems on checking the right of the patients who came to receive service; Some hospitals had problems about limitations of checking right; for example, the right of patient could not be checked on the internet or out of the official hour; this generated problems in providing service for the patients in case of AE out of the official hour. In some hospital, there were problems occurring to the information system such as internet system.

"…The problem was that sometimes, internet could not be accessed or failed…"

(Head of Health Insurance Division in community hospital)

"…Mostly, it would be late because it has to be checked from internet. Sometimes, the system failed or caused problem…"

(Nurse in regional hospital)

"…Sometimes, our computer system that checked for the right, we could check only when it was the official hour. The problem occurred out of the official hour, then we explained them that we could not check the right for them. Then we would ask them. If it was really emergency…"

(Nurse in community hospital)

"…The problem was that we had no unit to check the right of the patients for all 24- hour…"

(Nurse in community hospital)

"…The problem was that the computer could not be used sometimes, then we could not check the right for the patients…"

(Nurse in community hospital)

3.7.6 Problems on service users

- The problem of that some patients still lacked understanding about the right and role in receiving service including conditions and exceptions in utilizing service in case of AE because the NHSO focused only on wide basis but did not provide details on benefit package. The patients still understood that they could use gold card under the slogan "30 baht for all diseases", but in reality, there were details that did not cover. This led to complaints.

"…Like the spot of NHSO 30 baht treat all diseases, it was the promotion of economy, but in-depth information, Thai people did not pay attention to the details and conditions. They just thought in negative way that they had gold card then why they had to pay 15,000 baht. They should pay only 30 baht to treat for all diseases without any conditions…"

(Head of Health Insurance Division in community hospital)

"…The thing that we knew but the patients did not know; this was because they did not care for the public information. They only knew that 30 baht could be used for treating all diseases in every hospital. They understood like this. In fact, there were a lot of conditions about gold card. Sometimes, the patients did not understand. The public information from the NHSO should help us in performing work very well by that the practitioners should not to explain to the patients again…"

(Physician in regional hospital)

"…The patients who used gold card sometimes felt that their gold card could be used with every disease; this meant that it covered the car accident. Some people could not understand this although they were explained already…"

(Physician in community hospital)

"…The problem was about the patients having gold card but they did not come from the common illness. They had a car accident then the car had no insurance, so they could not use gold card. We explained them already, but they did not understand. They were angry about this and keep telling that the gold card was useless. We told them that they could not use gold card, they had to pay on the part that did not cover that was 15,000 baht, then beyond this, they could use gold card; but they did not understand…"

(Nurse in general hospital)

"…They would tell that the right to use gold card could be used all over the country. Sometimes it covered the Traffic Accident Victim Protection Act. So, they thought that in case of car accident, they could be covered. So, we had to explain to them again that it was under the Traffic Accident Victim Protection Act…"

(Nurse in community hospital)

"…Mostly, the problem was contrary to the Traffic Accident Victim Protection Act matter. Mostly, they would request for using gold card due to the car accident. They intended to use gold card, but we let them use the Traffic Accident Victim Protection Act instead…"

(Nurse in community hospital)

"…Basically, the patients did not know that why the gold card could not provide all right to them; in case they had accidents falling the motorcycle then the motorcycles had no insurance, they told that the vehicles were old, the insurance could not be made. So we had to explain to them that why they could not use gold card…"

(Nurse in community hospital)

"…The problem was about the car accident. They would tell that they had gold card so why do they have to pay…"

(Nurse in community hospital)

"…The understanding of people in that the gold card could be used all over the country, but the condition was that only 2 times, this may not be known to people as we have not make a public information…"

(Nurse in community hospital)

- The problem of that the patients had no evidence showing the right or did not produce the proof; for example, they did not bring gold card with them, or they did

not bring identification card with them, this caused problem of using right in case of AE.

"…In using emergency right, we had to use the evidence that was the gold card and identification card; mostly, they did not bring them in full…"

(Physician in regional hospital)

"…The patients who came from up-country, when came to admit at the hospital, sometimes, they had no sufficient evidences. When checking right, some were children of 14 or 15 years old. They had to produce identification card then we had to wait for producing other evidences such as housing registration, certificates issued by the government agencies…"

(Nurse in general hospital)

"…The problem was that they rarely brought gold card with them or did not bring necessary document such as identification card; sometimes, they brought others' gold cards…"

(Nurse in community hospital)

"…The problem was that the patients visiting their relatives here did not bring the gold card with them. This problem occurred to the children mostly because the children did not bring the gold card with them and they had no housing registration and had no identification card. When we provided right to the patient, we had to request for claim code but we were not sure that some patients had no 13-digits identification card number. So it was hard to request for claim code…"

(Nurse in community hospital)

"…If no evidence, we could not check that whether you used gold card for real or not because living in up-country, the people did not bring gold card and identification card with them…"

(Nurse in community hospital)

"…Some people had no sufficient evidence. Some had no 13-digits identification card number. This caused problem and we could not do anything…"

(Nurse in community hospital)

"…Problem of that the patients had no gold card or did not bring gold card with them. They told that they have already had it but never take it. So we had no these evidences. The problem was that when checking on the internet, if there was no 13-digits identification card number. Then we could not help them…"

(Nurse in community hospital)

"…Mostly, the problem was about the evidence. It was hard to detect. Sometimes, they had nothing to identify themselves…"

(Nurse in community hospital)

- The problem of that the migrant workers moved since some hospitals there were people moving to work in the area but have not move their names out of the housing registration. So they could not use right when they were sick. This caused problem of expenses to happen. Finally, these patients would be the burden of the hospital and they needed help without being collected money or reimburse from the NHSO

"…Those who migrated did not move residence. They did not want to have gold card here. They would have gold card there. We had to admit them and paid but we could not collect money from them…"

(Director of regional hospital)

"…Mostly, the patients had real problem. The regulations were that they could change the registered hospital but they may not know this. Someone knew but could not do it. Therefore, they would have trouble on medical expenses. Most of them knew but they had no time. They had to earn a living, their houses were far away…"

(Head of Health Insurance Division in community hospital)

"…Some cases were not emergency but we did not know what to do. Then the patients who worked in different provinces but came back to visit their relatives. If they were sick, they wanted to use right in case of emergency, but the doctor could not do this…"

(Physician in community hospital)

"…Those who came from up-country for working, came to live with their mates for a long time but have not moved their names in. Then they came to be treated many times but we could not help them sometimes. We told and advised them on moving their names in…"

(Nurse in community hospital)

"…One problem was that they moved in here for 10 years but they have not changed their addresses and did not change registered hospital. Then they often be admitted. They have already been advised but they did not change…"

(Nurse in community hospital)

In brief, in total image of problems and obstacles in providing service for the patients of the case of AE under the UCS including problem on policy and regulations:

policy and regulations were not clear and often changed. The reimbursement from the NHSO was very late. The coordination between areas and various agencies had problem. Problem on personnel: the number of health personnel was not sufficient and they lacked understanding in rules and regulations. Problem on medical equipment: there were no sufficient medical equipments or they were so old and inefficient. Problem on service system: the understanding on the term "emergency illness" between doctors and patients were not corresponding. Problem on information system: the beneficiaries database was not current or up-to-date, and the information system was not good enough. Problem on the service users: the patients lacked the understanding in right and role in using service, the patients had no evidence to show the right or had no sufficient evidence, and the people moved in the area but did not change their registered hospital.

3.8 Recommendations of health care providers for improvement of the accident and emergency service system under the Universal Coverage Scheme

According to the interviews with hospital administrators and health care providers, they proposed recommendations to serve as a guideline for improvement of AE service system under the UCS as follows:

3.8.1 On policy, rules and regulations

- The NHSO should determine the definition of emergency illness to be clear that what diseases should be covered.

> *"…This criteria should be determined on the disease that it should be made narrower, as it was too wide in looking for the scope for the diseases…"*
> (Head of Health Insurance Division in community hospital)

> *"…Emergency criteria determined may be too narrow, they should be more flexible more than this…"*
> (Physician in community hospital)

- The NHSO should determine the policy, rules and regulations to be clear, definite, and not often change.

"…The system was still set in good position but it should be still and not frequently change…"

(Physician in regional hospital)

- The NHSO should improve the program of requesting the claim code in order to prevent from repeated claim code in case that the patients were treated continuously so as to preserve right of the patients in case of emergency outside the registered province because the request for claim code in case of emergency outside the registered province could request for claim code for only 2 times a year.

3.8.2 On service

- There should create understanding concerning the meaning of the term "emergency illness" to be corresponding between the service users and health care providers in order to reduce conflicts between service users and health care providers when there was emergency case.

"…There should be public relation for the patients who received service in case of emergency, they could understand briefly. Sometimes, we had the advertisement as the media. This could make the patient to be able to understand that we had disease like this, we should do it step by step. If we could help the patients understand more, then they could know that this was done like this all over the country…"

(Physician in community hospital)

- The NHSO should support the development of AE service system in each hospital to be more efficient by supporting the medical equipments that were necessary for providing AE service in the shortage area such as vehicle for referring the patients.

"…There should be development of emergency unit of each hospital; for example, there should be ambulance to wait as now the budget was very little, we alone had no money to invest, we had to rely on budget that NHSO provided…"

(Deputy director of general hospital)

3.8.3 On benefit package

- The patients should be treated in hospitals all over the country whether it was the emergency case or not, like the disabled and veteran.

> *"…It should be used everywhere like that of the disabled. There was Central fund, then paid under the performance of admitting. If the hospital worked hard, you could bring such performance, but did not pay individually or per capita…"*
>
> (Head of Health Insurance Division in community hospital)

> *"…It was desired that 30 baht should be used with every hospital meaning that the patients should be able to go anywhere they want…"*
>
> (Physician in community hospital)

> *"…They should not be limited on using gold card. They should use it in general hospitals that were not regional hospital…"*
>
> (Physician in community hospital)

> *"…Actually, the patients should use service everywhere. They should not worry about it, but they did not understand now. They thought that they could use it everywhere and it should be like that…"*
>
> (Nurse in general hospital)

> *"…It should be that they should use it everywhere in all over the country…"*
>
> (Nurse in general hospital)

> *"…If they had gold card, they could enter in whether it was the emergency or not. They could choose the hospital. If they held gold card which did not have to be identified, they had equal right on gold card, just 30 baht all over the country, could use with hospitals all over the country. If so, the patients should be more convenient…"*
>
> (Nurse in community hospital)

- The right of emergency should be used without limiting on frequency of hospital visit like that of accident injury

> *"…Now, they still limit the frequency of hospital visit. This was difficult to control and to check. What the health care provider should do? Should they request for claim code first or cannot reimburse…"*
>
> (Director of community hospital)

"…There should not be limits on the frequency of hospital visit for emergency illness at all. It should be widely open. If you wanted to make patients impressed, you should not limit the frequency of hospital visit at all…"

(Head of Health Insurance Division in regional hospital)

"…In emergency cases, there should be no limitations on frequency of hospital visit. If it was not emergency, then would pay on ones' own. But in emergency case, the medical expense was high, so there should be help…"

(Head of Health Insurance Division in community hospital)

"…Not limiting the frequency of hospital visit like the accidents, then the hospital could consider that it should be better…"

(Head of Health Insurance Division in community hospital)

"…Emergency 2 times per year, it should be free on emergency illness, but if under the follow up visit, you should use the normal right because you had chance to change registered hospital. The emergency could not tell that you could go back home today, tomorrow you may have it again for 30 days or 30 times, especially asthma…"

(Physician in community hospital)

"…The specification that in emergency case, could use only 2 times outside the registered province. In fact, it was difficult to check. If it was possible, the emergency service should be provided. They should not be limited on only 2 times…"

(Nurse in regional hospital)

"…In case of emergency, if providing the unlimited frequency of hospital visit as it was never been known how many times the emergency illness would happen. Some people may be of bad luck. They may have emergency illness for more than 2 times, so they had to pay by themselves. If it was true emergency, it was a pity on them…"

(Nurse in community hospital)

"…If the frequency of hospital visit could be abolished, it should be very good. If it was in case of emergency, the gold card should be used without limiting…"

(Nurse in community hospital)

- The identification card should be used in place of gold card so that there would not have many cards or the electronic identification card may be used.

"…It was complicated that the gold card must be renewed. Could it be identification card instead?…"

(Head of Health Insurance Division in community hospital)

- The childbirth delivery should be one kind of emergency case and could use right of emergency at any hospital.

> *"…I wanted to let the 2 times of child delivery as the emergency case. It could deliver any time and anywhere. The child delivery was emergency. Now the standard of child delivery was very high. If there was no team work, no blood bank, it would not be completed…"*
>
> (Nurse in community hospital)

> *"…Case of child delivery that where one would deliver should be the right of that person to choose…"*
>
> (Nurse in community hospital)

> *"…If the child delivery was considered as emergency case, it may be one time of emergency illness and this was convenient…"*
>
> (Nurse in community hospital)

- The benefits should be expanded to cover all diseases including the injuries resulted from traffic accident.

> *"…Wanted to cover the Traffic Accident Victim Protection Act as well as it was complicated, for example, the car accident patients, the Traffic Accident Victim Protection Act covered payment. They should use right of gold card, but we had to reimburse from the Traffic Accident Victim Protection Act…"*
>
> (Nurse in community hospital)

- The use of right under the UCS should be limited to be like the SSS excluding the suicide or hurt oneself to try to kill oneself.

> *"…About the social insurance and gold card, the gold card was far better, committing suicide by having drugs could be covered by gold card but the social insurance did not cover…"*
>
> (Head of Health Insurance Division in regional hospital)

> *"…The gold card covered those who commit suicide but the social insurance did not cover…"*
>
> (Nurse in regional hospital)

> *"…Sometimes, the matter of hurting oneself like committing suicide, having alcohol, quarrel and beat each other, should the money be collected ? Why the society had no punishment…"*
>
> (Nurse in general hospital)

"…In case of doing to oneself such as abortion, taking drugs to kill oneself, such person should use right like those of social insurance…"

(Nurse in general hospital)

"…The patients who committed suicide, in fact, they hurt themselves, and they could use gold card, but the social insurance did not involve this; even the abortion, the gold card covered…"

(Nurse in community hospital)

3.8.4 On the service users:

- There should be public relation for people regarding their own rights and roles in receiving service. The issue that the NHSO should pay attention to and hurry to make public relation in order that the people had more knowledge and understanding including those who had accidents from the car under the Traffic Accident Victim Protection Act.

"…The public relation should be from the NHSO that there were various media. We were the practitioners, it would be very difficult from the media that they advertised or public relation that was from the lack of clarity…"

(Physician in regional hospital)

"…The people who had right often did not know, this may require public relation. The people should know that when to come to hospital, what to do. One problem was that when they came to the hospital, they did not know what to bring with themselves. If ask them that what they knew about 30 baht Scheme, they rarely knew. They had right but they did not know how to use right correctly. They should be told that what card they should hold especially for the children of 0–12 years old in that what evidences were required…"

(Nurse in regional hospital)

"…The existing system was good. How to do to make all people know their own right? There should be increase on public information…"

(Nurse in general hospital)

"…The promotion of using gold card was important. There had to be public relation because sometimes, the people understood that they could use gold card with everything. But if there were details informing that which disease you could use with the gold card, then the problem should not happen…"

(Nurse in general hospital)

"…Mostly, those who held gold card did not really understand the right of gold card. They should know more details…"

(Nurse in general hospital)

"…Sometimes, the patients may not know that they could use right of emergency case when they went to work in other area. If they went to be employee in Bangkok, in case of emergency illness, they had right to use service for 2 times…"

(Nurse in community hospital)

"…The patients had right but they should know their own right more than this. There should be public information…"

(Nurse in community hospital)

"…The promotion of NHSO for the villagers to know that now how were their rights, so that they could know their own right and how to use it…"

(Nurse in community hospital)

"…About the public relation for the people so that they could know their rights and duties more because they knew very few. Sometimes, as the health care providers to speak, sometimes, they did not follow. In television, the message stated that they could use gold card everywhere, but when coming to hospital, why the hospital did not let them use gold card ? Or why the hospital told that the gold card has already been used for 2 times ? This time you had to pay by yourself. This was really the case. The main issues were told but the less details were not informed…"

(Nurse in community hospital)

"…There should be more public relation, while traveling, the identifation card or gold card should be brought…"

(Nurse in community hospital)

CHAPTER V

CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS

5.1 Conclusions and discussion

The objective of this qualitative research was to analyze the system for patients utilizing AE services outside the registered provinces under the UCS from provider perspectives. The study was conducted in 6 provinces namely Chonburi, Khonkaen, Nakhonratchasima, Mukdahan, Phatthalung, and Samutprakan. Data were obtained from document review, and interviews with the following groups: 1) provincial health administrators 2) hospital administrators 3) officers responsible for the UCS and 4) AE service staff such as doctors, nurses and other related officers. The data collection was performed from March to September, 2005. The results of this study were summarized as follows:

The administrative structure in the provincial level of all the six provinces comprised three provincial subcommittees: 1) Provincial Subcommittee on Health Security Administration 2) Provincial Subcommittee on the Health Service Standard and Quality Control and 3) Provincial Subcommittee on the Preliminary Financial Assistant of Patient. There are representatives from organization of government sector, private sector, and public sector involved. Each province had different meeting and operation. Furthermore, in each province, there are additional appointments of working groups under the suitability in order to support the operations within the province.

Budget allocated to each province in fiscal year 2005 ranged from 375-585 baht/person/year. Exclusive capitation model was adopted for all 6 provinces. The budget for outpatient care (OP) would be paid to the CUP on a capitation basis. The inpatient care budget (IP) would be managed at the provincial level; and hospitals could be reimbursed based on the DRG. There were various models of budget allocation in each province.

The operations of the UCS in term of health insurance coverage of population, it was found that the overall health insurance coverage of population of every province was increased. Each province was accelerating to explore and monitor uninsured population (non-registered person) in the responsible area in order to register and issue health insurance card. In addition, people changing registered hospital were monitored including the duplication of health insurance rights in order to correct and submit data to the NHSO for updating beneficiaries database.

According to the study, it was found that two out of the six provinces had deducted some money to pay for AE that occurred within the registered province while remaining four provinces had not deducted some money to pay for AE that occurred within the registered province but letting the hospital to collect and pay by itself. For the criteria and guideline used in considering the emergency illness, it was found that two provinces had determined their own criteria and guideline for considering emergency illness in the provincial level while remaining provinces had no specification of criteria and guideline for considering emergency illness in the provincial level depending on the discretion of doctors who provided treatment in each hospital. Therefore, criteria and guideline used in considering emergency illness of each province are same in some ways and different in some ways.

The patient referral system under the UCS, it was found that every province had specification of procedures and practice guidelines in referring patients including the method of payment in case of referring patients both within and outside the province clearly by specifying patients to use service under the procedures. In case of bypass to receive service at other hospitals under no refer system (no accidents and no emergencies), the patients had to pay by themselves and could not use gold card. Some provinces allow the patients to bypass without charging patients in case that the patients use service of wrong procedures only for the first time. Every province must specify to refer within the province first. Some provinces in where the university hospital located, would specify that referring patients to another province must pass the university hospitals for all cases. Some provinces used method by that the hospital paid by itself. Besides, some provinces had burden of paying in case of referring the

patient to another province highly due to lack of specialist doctors to give the medical treatment.

On the part of the complaint handling system under the UCS, it was found that the complaint accepting center was established in every Provincial Health Office and hospital as a channel for people to send their complaints or questions regarding service of UC scheme. Most of the complaints were related to inconvenient to receive services as well as a limited right and an unfair service-fee charges. However, most of them are completely closed when a negotiation was finished.

For the opinion towards service system in case of AE under the UCS, the provincial administrator agreed that the Traffic Accident Victim Protection Act should be merged with the UC to be same fund. Some agreed that the budget for AE should be allocated to the province so that the province can manage by itself instead of deducting money at the Central fund because the big and small province can have advantage or disadvantage to one another. In addition, the budget for AE allocated at the Central fund may cause a problem on reimbursement because the ability of each health officer who are responsible for reimbursement is different. Some agreed that the adjustment of payment method in case of AE may affect in the provincial level if budget for AE deducted at Central fund is increase because it has reduced the allocated budget to the province.

Recommendations for AE service system development under the UCS, the provincial administrators proposed that the officers' salary budget should be separated from the per capita budget and should increase the per capita budget properly. The coordination between the NHSO and MoPH should be improved for mutual understanding. The NHSO should report to PHO on the administration of the AE fund. The NHSO must create understanding about the condition on the application of rights in case of AE to the people.

According to the study of current situations in organizing service system for patients in case of AE under the UCS in regional hospitals, general hospitals, and community hospitals; it could be concluded as follows:

- All public hospitals provided service mainly on patients centered without considering patients' health insurance rights. Every hospital had established a health insurance division responsible for examining patients' right, certifying the use of patients' right, follow up and collecting patients' documentary evidences, providing information to people, accepting complaints, and cooperating with other related organization both within and outside the hospital.
- The pattern of administrative structure of UC was different in each hospital. According to the study, it was found that the pattern of UC administration structure in some hospitals was not clear. It was the working by separating into various divisions without units to be responsible directly. This is the cause that makes system on medical expense collection in case of AE across the registered provinces in such hospital not efficient enough. It may be because there is no sufficiency linkage between related divisions.
- According to the study, it was found that the information service system involving the patients' right protection in each hospital was different. Some hospitals tried to find the right for all patients while in some hospitals, the health officers still not fully operated. The health officers of some hospitals would provide information for the patients concerning the using of right in case of emergency illness that gold card could be used only 2 times a year and inform of total medical expense to the patients in order to give a chance for making decision whether they would use the right or not.
- According to the study, it was found that the health care providers and the patients still understood the meaning of "emergency illness" not correspondingly. This created problem of conflicts between service users and service providers. Furthermore, in practice, the consideration of emergency illness depended on the discretion of doctors in each hospital. Each doctor will diagnose emergency illness differently. This affects patients in negative way.
- On part of reimbursement for medical expense from the Central fund in case of providing service for the AE patient across the registered provinces, it was found that the hospital had problem in requesting for compensation from the NHSO in which there were complicated procedures to the extent of delay in paying compensation or sometimes, the payment was refused because there had to be

check for accuracy of the using of right at the NHSO, making some hospitals to have problem of lacking financial flow. Besides, the NHSO had stipulated the conditions and there was period of time of delivery data for reimbursement, making some hospitals not be able to send data in time.

- According to the interview of health care provider, it was found that there were some patients who could not use right in case of AE due to the rules and regulations of the system. However, in practice, the use of right under the Traffic Accident Victim Protection Act still had problems because there were some car owners who avoid being insured under the Act, or in case of lacking evidence, making the patients had to pay by themselves. To let patients use right in case of emergency illness across the registered provinces for twice a year was the important obstacles that make patient to use right in case of emergency illness for 2 times in full, then could not use right again although it was the case of emergency. Or in case that the doctors diagnose that it was not the case of emergency illness, this made the patients could not use right, or the patients who bring gold card to receive service in case of AE, but when the hospital check for right and then found that the patients had duplicated right with the other health insurance scheme, making them not be able to use right with gold card.
- According to the study, it was found that the service providers faced problems in providing service because some patients still lack knowledge and understanding concerning right and duty in using service in case of AE including the conditions and exceptions on part of such right. It was found that the patients still lack knowledge of their own rights. Some patients had wrong understanding about right in using service. One issue that the understanding was wrong that was mostly found was that the patients with gold card but experience accidents from cars, in this case, the gold card could not be used, making the hospital to have burden in pointing out the patients more and creating problem of conflicts with the service provider and leading to more complaint. Furthermore, the service providers agreed that some patients did not pay attention to the gold card enough that was, they did not carry gold card and identification card with them while they were travelling; this created problem in using right in case of AE because in practice, each hospital had its own rules and regulations to produce evidence in using right of patients differently.

- The migrant labors who moved their residence in other province were the problems of many areas because some areas, there were a lot of migrant labors coming to live in. Many people lived for very long time. But most of them did not move their names in the current house registration or did not request for changing the registered hospital until they became ill, making it is impossible for the patients to use right in case of common illness. This group of persons, when became sick, would request for receiving service of medical treatment of the hospital that need help without charging money from the patients or reimbursing money from the NHSO. Although currently, the NHSO had adjusted the rules in changing the registered hospital in case of moving address that would move house registration or not by using certified current address by house owners. In practice, there were many problems. According to the study, it was found that a group of migrant laborers were still get problems on access to health care. Therefore, it is very important for the NHSO to adjust the condition in order to be suitable and more flexible, making the migrant laborers could access to health care equal the other groups.

The information from this study, it was found that most respondents agreed that service system for patients in case of AE under the existing UCS was suitable. They agreed that this system could protect and save the patient's life who used gold card in case of AE outside the registered province, because the AE had chance of taking place everywhere that could be avoided. However, some respondents especially in the group of the hospital administrators agreed that the reimbursement of medical expense from the Central fund in providing service for patients in case of AE with the complicated procedures and many documents had to be used. The payment was delayed, making the hospital lacking motivation in reimbursing such compensation. Some respondents agreed that payment rate for medical expense reimbursement of the Central fund given to the hospital in case of AE was less than the actual expense, making the hospital became lost. Some respondents agreed that after having the UCS, the patient referral system would be controlled by payment that the hospital would refer patient in case of cure by itself.

When asked the opinion on the criteria specified to use right in case of emergency illness for twice a year, it was found that some respondents agreed that criteria specified to use right in case of emergency illness for twice a year was suitable because if more than twice was provided, this would make patients lack enthusiasm in take care of their rights while some respondents agreed that the specification for using right in case of emergency illness for twice a year was too little because it may limit the access to care for the patients who have their own necessity, and proposed that there should be increase the times of using right in case of emergency illness for 4 times a year. Furthermore, there were some respondents propose to cancel the conditions determining for using right in case of emergency illness for not over twice a year because it was too much limitation for patients and may affect the access to care of patients. However, the NHSO should consider and review the advantage and disadvantage of criteria specified for the patient to use rights in case of emergency illness outside the registered province which was allowed for twice a year. This may affect access to care of the patients who need to be cured and could not afford the medical expense. In addition, the NHSO should study the feasibility of cancellation for the conditions determining for using rights in case of emergency illness for not over twice a year. The data would be used for decision making and adjustment of conditions on applying the rights in case of emergency illness under the UCS in order to be suitable and more flexible on the benefit of all patients.

In the fiscal year 2004, the NHSO had changed the provider payment method in case of AE by cancelling the exiting criteria allowing medical reimbursement for only first 72 hours. The criteria was changed to reimburse all medical expenses from the NHSO and registered hospitals without paying the remaining expense. However, when asking opinions concerning the service providers on this issue, it was found that most of respondents agreed with the cancellation of 72-hour criteria because in the past, there were many problems in practice; it was agreed that the cancellation of such criteria would affect good to patient and service providers because this would make registered hospital not to worry about the expense. The hospitals that provide services ensure that the medical expenses could be collected from the NHSO. At the same time, the patients would get more convenient and could continue their medical treatment until the treatment ends without referring back to the registered hospital.

According to the study of knowledge and understanding of the service providers concerning the use of right in case of AE under the UCS, it was found that most of service providers had accurate knowledge and understanding about the regulations and conditions for utilizing AE services of the patients under the UCS while some service providers did not know or misunderstood some details on benefits and conditions for utilizing such service. This was the issue that the concerned organization must stimulate to make public relation and provide information in the details on benefits and conditions of using service in case of AE in such groups of service providers more in order that such group could have corresponding and correct understanding. Because the inaccurate knowledge about patients' right could affect directly to an access of patient toward a health care as well as generated patient's complaints as a consequence.

For the guideline in considering the emergency illness, it was found that most of the hospitals used the AE criteria specified by the NHSO. However, in practice, some hospital followed the guideline strictly while some hospitals were more relaxed depending on the policy and discretion of doctors who provided treatment in each hospital. However, most of the doctors similarly had criteria and guideline in considering the emergency illness that they would consider from the diseases and symptom whether their illness was severe and need of emergency treatment for that symptom. If it was the minor illness that could be waited, it would be considered as non-emergency; but if it was the severe illness or acute illness, the patients must be operated urgently, this would be considered as the emergency case because the illness needed to be cured immediately from doctors; otherwise, it would threaten the life. Besides, some doctors considered emergency illness from vital signs. Also, there were other factors needed to be considered such as patients' age, and the convenience and necessary of patient. Moreover, some hospitals considered emergency illness based on patient's point of view. These hospitals gave importance mainly on humanitarian reasons. Patients with a normal illness were allowed to use gold card as emergency case because the hospitals tried to avoid the complaints and conflicts.

According to the study, factors that caused difference of claim data submission on medical reimbursement in case of AE in the study area consisted of several factors

including non-registered people and their families, being tourist attractions or educational center, and transportation route, efficiency of system on medical expense collection in case of AE of each hospital, characteristics of emergency illness in each area, high cost patients from AE, system for examining the rights of each hospital, and criteria on consideration of AE of each hospital. Each hospital depended on different factors.

Problems and obstacles in providing service for the patients in case of AE under the UCS included problem on policy and regulations: policy and regulations were not clear and often change. The reimbursement from the NHSO was very late. The coordination between areas and various agencies had problem. Problem on personnel: the number of health personnel was not sufficient and they lack understanding in rules and regulations. Problem on medical equipment: there were no sufficient medical equipments or they were so old and inefficient. Problem on service system: the understanding on the term “emergency illness” between doctors and patients were not corresponding. Problem on information system: the beneficiaries database was not current or up-to-date, and the information system was not good enough. Problem on the service users: the patients lack the understanding on right and duty in using service, the patients had no evidence to show the right or have no sufficient evidence, and the people moved in the area but did not change their registered hospital.

On the part of hospital administrators and health care providers, there were various recommendations for AE service system development as follows: The NHSO should specify the policy, rules and regulations to be clear, definite, and permanent. Program for requesting claim code should be improve in order to prevent the duplication of claim code. The NHSO should create understanding about the meaning of emergency illness to be corresponding between service providers and service users. The NHSO should support the development of AE service system to be more efficient. The patient should be treated in any hospital all over the country. The use of right in case of emergency illness outside the registered province should unlimited times like that in case of accident. The identification should be used in place of gold card. The child delivery should be emergency case that can use right at any hospital. Expand the

benefit package to cover all diseases including injury from car accident. The use of gold card should be limited to be like the other health insurance scheme. Create the understanding among people regarding their rights and duties in receiving AE services.

5.2 Recommendations for utilization of research results

According to the result of this study, there were some recommendations for improving the AE service system under the UCS as follows:

5.2.1 On policy, rules and regulations:

The NHSO should specify the policy, rules and regulations to be clear, definite, permanent, and standardized all over the country, improve the coordination of the central administration and the area to have corresponding understanding, improve rules and regulations in working process in each area to be same guideline in order to coordinate work more smoothly, more conveniently, and more rapidly. The NHSO should identify or specify the definition of “emergency illness” to be clear and the practitioners should have corresponding understanding because in the past, there were a lot of problems since the definition of emergency illness specified by the NHSO were wide and not clear in practice guideline. In practice, each hospital would consider and follow the guideline strictly and flexible not similarly. Partly cause the difference of claim data submission on the medical reimbursement in case of AE of each hospital.

5.2.2 On benefit package:

There should be consideration to terminate the conditions specified to use right in case of emergency illness outside the registered province for not more than twice a year by allowing to use right in case of emergency illness outside the registered province for unlimited times like that in case of accident because it will make the hospital have workload in checking for right of the patients for every time before providing service. There should be consideration to correct and improve benefit

package of various health insurance scheme to be similar as much as possible; this can reduce the duplication of right.

5.2.3 On budget:

The government should increase adequate capitation budget and appropriate in all area. There should separate the salary budget of health personnel from the per capita budget. There should not deduct the budget at the Central fund too much but should allocate to the area more in order for convenience in management of the UCS to be efficient. About the reimbursement for medical expense in case of AE outside the registered province, the NHSO should consider adjusting the payment rate of compensation to the hospital that provides service to the patients in case of AE according to the actual expenses.

5.2.4 On medical equipment:

The NHSO should consider supporting the development of AE service system in each hospital to be more efficient by supporting the necessary medical equipments.

5.2.5 On information system:

The NHSO should improve the database system to be modern and reliable because there are still mistakes on the right of the patients; this create problem in checking for right and affect the patients to not be able to use right. The program for communication and performing work that should consider to favor the performance of the health officers for more than that of the former one because now, there are a lot of problems. Program for requesting claim code should be improved in order to prevent from duplication of claim code in case that the patients are treated continuously in one time and it is to maintain right of the patients in case of emergency illness outside the registered province.

5.2.6 On management and administration:

In the researcher’s opinion, the health officers in some hospitals still lack the clarity in performing work and pattern of administration to separate the divisions and

responsibilities to various divisions without having divisions to be responsible directly, this make system of collecting medical expense in case of AE across the registered province lack efficiency. Partly may be because there is no sufficient linkage between concerned divisions. Working system should be adjusted to be more systematic and regular linkage of data in order to increase efficiency on the collection of medical service charge, which can collect the medical expense completely.

5.2.7 On service providers:

According to the study, it was found that the service providers in some hospitals did not know or misunderstood about details of benefit and condition of using right in case of AE under the UCS. Therefore, the concerned organization should stimulate on making public relations in order to increase understanding about details of benefits of the patients who hold gold card especially in case of AE in such group of persons to understand correctly.

5.2.8 On service users:

The NHSO should have public relation for the people to understand comprehensively of the extent of being emergency case in order to reduce the conflict between service users and service providers. Also, there should be public relation for the people in order that they can know their own rights and duties in receiving service, details of benefit, especially conditions and exceptions in using right in case of AE. The issues that should be paid attention by the NHSO and should stimulate to make public relation to have more understanding are case of car accident in which the gold card cannot be used, this case shall use right under the Traffic Accident Victim Protection Act first, then the rest will be covered by the gold card; During traveling, the gold card should be carried with the identification card; In case of emergency illness, they can use service for 2 times. There should be identification of right and benefits that are important for the people to know on the gold card clearly. Furthermore, there should be public relation for the people to know their own rights and duties. Regulations and procedures necessary of the 30 baht scheme should be operated to make known to the people regularly if there is any change in the program.

5.3 Recommendations for further research

The study of AE service system for the patients utilizing services outside the registered provinces under the UCS in this research focused only from provider perspectives. However, it might not complete the overall picture of AE service system due to lack of patient perspective. Therefore, future study should be focused on the patient perspectives. Further study on the experience, understanding, and perceptions of the patients in utilizing AE service under the UCS. This would allow patients to express their opinions toward the AE service system under the UCS, problem in utilizing AE service and propose recommendations for improvement of the AE service system under the UCS in the future.

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