CHAPTER 4

FINDINGS AND DISCUSSION

This chapter presents the process of discharge planning development as well as implementation modification. The participant's data and the participatory development of discharge planning for CCU and its implementation were contributing to this chapter.

The participant's data

As described in chapter one, this study planned to study discharge planning in both CCU and sub CCU. The participants, therefore, were all in both wards. There were totally 30 nurses, 18 from CCU and 12 from sub CCU. Almost all of nurse participants (96.67%) were female with only one male in this group. The age of the participants ranged from 23-42 years old. Just over three-fourth of these group (76.33%) were 23-30 years old, six (20.00%) were 31-40 years old, while only two of them (6.67%) were more than 40 years old. All of them were Buddhists. Regarding educational level, most withhold bachelor degree (90.00%), and only three were master prepared. Seventy percents of the participants had 1-5 years of clinical experience, two (6.67%) had 6-10 years and seven (23.33%) had more than ten years of clinical experience (Table 1).

There were few CCU nurses (23.00 %) who have been trained for critical care and cardiovascular care through short courses which were provided periodically.

Even though 76.67 % have not attended the formal critical care short course, all of them have been prepared for working in CCU.

Table 1

The demographic characteristics of nurse participants (N = 30)

Characteristics	Number	Percentage
Age (years)		
23 - 30	22	76.33
31 - 40	6	20.00
> 40	2	6.67
Gender		
male	1	3.33
female	29	96.67
Level of education		
BN (bachelor degree)	27	90.00
Master	3	10.00
Religion		
Buddhism	30	100.00
Critical care training		
yes	7	23.33
no	23	76.67
Years of clinical experience		
1 – 5	21	70.00
6 - 10	2	6.67
11 – 15	7	23.33

Other participant's data

Medical staffs, patients and family members who were at CCU during the time this project was going on (April 2000 – Dec. 2001) were also the study's participants. There were 1417 patients admitted to CCU and sub CCU and 425 patients and family members received discharge planning protocol. Data from Medical Record and Hospital Statistics Section, Maharaj Nakorn Chiang Mai Hospital revealed the average length of stay (LOS) in 2001 of 3.63 days for CCU and 2.58 days for sub CCU, while in the year 2002 the LOS was 3.25 days for CCU and 2.55 days for sub CCU.

The process of discharge planning development for CCU

The whole process consists of four main components: 1) preparation which was the working group formation and planning for group activity; 2) problem identification and planning; 3) implementation which were acting and observation; and 4) evaluation and reflection. This discharge planning development process used the participatory action research as a framework. This research project started since the first week of April 2000.

Preparation : Working group formation and planning for group activity

In order to conduct discharge planning effectively, the working group was formed at the time the nurses became concerned about the large numbers of patients readmitted with severe complications, and some patients often called the CCU nurses

after being discharge asking about their clinical conditions, and some mentioned not having enough information regarding their self care. The researchers and both head nurses had mutually agreed with those problems and considered that those problems were related to ineffective discharge planning practice. The researcher, therefore proposed the project to improve the discharge planning practice in CCU which was well accepted by all head nurses. The wards agreed to set up the working group. Since CCU is the critical care setting of which patient's clinical condition is always changes rapidly and emergency care and patient monitoring is required, not all nurses were involved at the beginning. However, all of them were informed about the project and all agreed to participate.

The working group, then, arranged the working plan and the timetable for the meeting in which the meeting was scheduled every two weeks. On the first meeting, the members shared their own understanding and idea about discharge planning, the past and present issues pertaining. Head of CCU was the leader of that meeting while the researcher acted as the consultant and facilitator for the working group. The purpose of that meeting was to make understanding about the process of discharge planning development among the working group.

Most members of the working group reported this understanding of discharge planning as only patient teaching just before discharge. After all members recognized that discharge planning involves the whole process of care, the group agreed to include discharge planning in their regular care plan and decided to develop a discharge plan and to revise the existing teaching plan. Working in this process, it was realized that the group needs someone to work as discharge planning coordinator. Considering the job and task responsibility of each member in the working group, it

was agreed that the most appropriate person to be discharge planning coordinator was the nurse educator of the ward.

The plan for discharge planning development was created mainly by the researcher, while all members were the participants throughout the research process. Seminar with clinical nurses had been done on the topics of discharge planning, quality of care for patients with cardiovascular diseases, and the process of participatory action research. The plan was also supported by senior managers of Nursing Division and Medical Nursing Service Section. Furthermore, the head nurses of both CCU and sub CCU wards acted as the significant key informants and the supporter for the working group as well. They would like the group to immediately build temporary strategies for discharge planning protocol developing and use in wards. During this preparation phase, the working group actively participated in discussion applying both theoretical and practical discourses. The group primarily concerned with the topic of "how can discharge planning activity be integrated in the daily care process." The conclusions from discussion and plan of tasks were presented in each following meeting session.

Since "CCU" in this study included sub CCU, which types of care provided are not exactly the same as CCU, the methods for exploring how to develop discharge planning for each unit started differently. For the CCU, in order to meet the needs of cardiovascular patients, the assessment tool and guideline for discharge planning practice was the first thing to be explored and developed. Most of patient admitted to CCU always have complex condition which results from the disease process and they need to be prepared for continuing care since the beginning of admission. On the other hand, the sub CCU decided to improve patient teaching strategies and family

approach first, since the care provided by this unit is often in a short time period and some patients were transferred from CCU. However, the ways of conducting research were the same. The researcher also concerned with the quality improvement approach.

The overall process of discharge planning development had been discussed during the first meeting. Beside the clarification of discharge planning concept, the strategy approach, timetable for meeting were proposed. The team decided to schedule the meeting sessions in every two weeks on Friday evening after ward shift changing in order to provide more convenience to members who worked in the evening shift and to easily access to patient's chart. By having regular meeting, theoretical knowledge was shared within the group and practical problems concerned by clinical nurses were integrated. Results from each team meeting had been shared with all members and conclusion was made. Each member was asked to think of the strategies for solving each problem as well as the action to be done and was asked to bring back the answer for sharing with group on the following meeting. The strategies suggested included reporting the progress of work in ward pre-conference every week, finding the method to get client's participation, establishing the collaboration from other disciplines, and planning the record for the progress of discharge planning practice.

During group working, the team learnt and agreed that the development and implementation of discharge planning were most likely to be succeeded if the group made strong decision to do so and if it was taken on an organizational basis. Understanding and commitment of senior staff were also essential for protocol development. The group, therefore, decided to share this project with senior staff.

Moreover, the outcome of the first exploration was shared with the stakeholders in the organization, the Director of Nursing Section, Head Nurses of Medical wards and Medical Intensive Care Unit, and cardiologists.

In order to obtain opinions and suggestions from key person, and to raise awareness among staff nurses, three hours-session was set to present and critique problems related to discharge planning among nurses in the hospital. The researcher also introduced the project plan to the hospital key persons at Maharaj Nakorn Chiang Mai. The participants in that session included the Director of Nursing Service Section and Nursing Administrative staff, Head of Medical Nursing Section, Head Nurses of CCU and sub CCU, Head Nurses of medial wards, and intensive care units.

The activities in that session began with the researcher shared the results of the previous pilot study, the situation related to discharge planning in coronary care unit which was explored during January - March, 1999 (Boonchuang, Pothiban, & Panya, 1999). Result from the pilot study revealed that there were written policy in the organizational strategic plan and only one kind of the recording from of discharge summary. There was neither practice guideline nor other evidence from documentation. However, findings from observation shown that most CCU nurses practice with some aspect of discharge planning. From interviewing, the nurses mentioned about the barriers to their discharge planning practice. These barriers included little understanding of discharge planning concept and the interdisciplinary goals.

Some nurses expressed their experiences and feeling that discharge planning in daily practices as showed in the following statements:

" In our everyday practice, discharge planning is employed as patient teaching before the patient's discharge. It will be done only when the physician give an order to discharge the patient."

" We just only assess the patient's knowledge and some aspect of needs on the day of the discharge ordered, and we have already had the Nurse's discharge notes as our guides (which is the form of discharge summary)...."

" Is it possible to build an interdisciplinary team in our hospital?.."

" In our hospital, it is accepted for a long time that discharge from hospital or transfer patient to another setting is the physician's decision making... "

" If we use discharge planning as our guide, what will be the responses..., what is the physician's opinion?... "

" Our hospital doesn't have any guideline for practice especially for discharge planning....and if it should be interdisciplinary approach, it should start with the group of health care providers....."

These expressions from group of nurses indicated the nursing practices were primary based on the practical knowledge and experiential knowledge, hospital policies, and protocols. Although most of professional nurses acknowledged the benefits of discharge planning, they did not practice it seriously. This problem seemed to be a professional doubt that the research team needed to investigate and overcome.

The researcher, therefore, proposed the research project and asked for more suggestions from these nursing administrators. Lots of suggestion were obtained and were proved to be very valuable for this study. Moreover, the researcher leaned from this discussion that this research project increased their interest in developing discharge planning. The support from the nursing administrators as well as the cooperation of staff nurses were ensured.

During this preparing phase the working group also planned for the research process. This group had to learn how to practice throughout the whole process, started with exploring the overall situation of discharge planning practice problems, planning for problem solving, implementing of the plan, and evaluation of the particular plan.

Problem identification and planning

In order to develop discharge planning, the researcher had to realize that she is a clinical nurse instructor who was the outsider of this setting and who did not have the intimate knowledge of the relevant context to the participants. The researcher had to share the concept of discharge planning from her extensive review with CCU nurses to increase their self-reliance. With understanding of the current situation of discharge planning practice, the researcher planned to participate in the improvement of these practitioners' skills by using adult learning theory as well as the researcher's practice to facilitate their learning. Facilitating learning and participating in CCU nurses regarding discharge planning was the strategy for beginning of this phase from which nurses were well equipped with skill required for discharge planning.

Within the spiral design of participatory action research, it emphasized that the problems regarding discharge planning and continuing care had to be concerned by all participants and none of the problem will be solved after they had been reformulated by the group. Also the strategies designed to address the problem had to be implemented over time. The steps for conducting this study were shown in figure 2

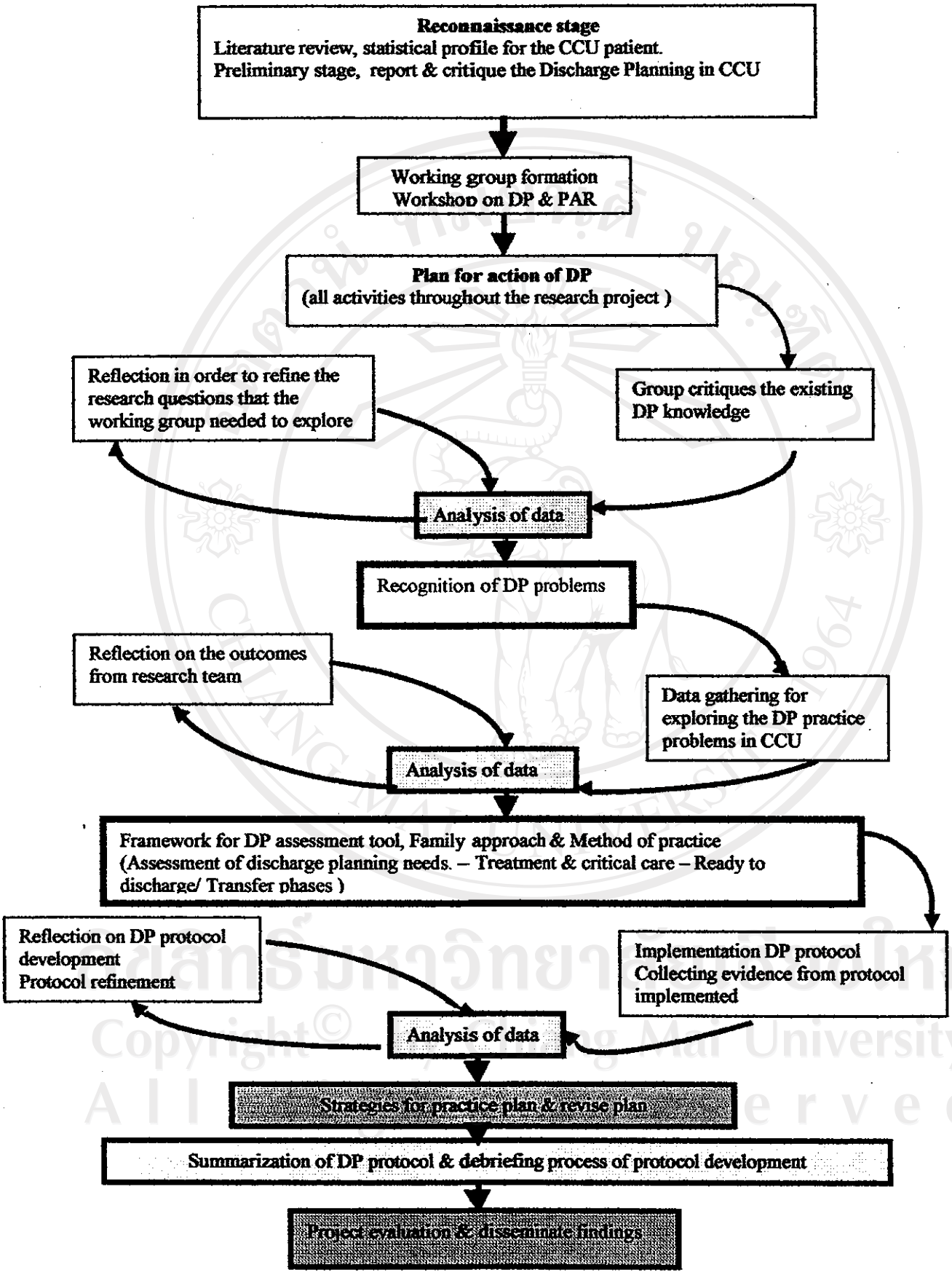


Figure 2 Mapping diagram of this study

1. Problem identification

As mentioned earlier, the spiral design was used to illustrate the ongoing movement of this research process. The study began with the experience of nurses who encountered with the large numbers of cardiovascular patients being re-hospitalized in the CCU with severe complication and life threatening conditions. This condition required health care professions to reconsider whether or not the patients were adequately prepared for continuous self care. The research team decided to explore the existing practice situation and developed a temporary working plan. Starting with the reconnaissance step when brain storming was used and priorities of the practical problems were set. The problems from discussion revealed that discharge planning was presented only in the hospital policy as an activity to be provided to all admitted patients. However, it is not well practiced in CCU. The barriers to discharge practice mentioned by nurses were work overload, not having guideline for practice and lack of understand overall of discharge planning process.

Group discussion

Even though the research team has identified problem regarding discharge planning, more opinions from other nurses were needed. Dialogue among nurses pertaining to discharge planning were conducted. At beginning, the researcher explored the nurses' understanding of discharge planning through discussion during ward meeting.

The practical issues raised by nurses implied that most of them did not understand clearly about discharge planning practice, as seen in the following statements:

" Our daily practice seems similar to discharge planning,... I don't know what kinds of practice are the discharge planning practice."

" First of all I would like to know how I can do this practice. Is there any assignment for this function specifically? "

Some nurses understood discharge planning has the same function as patient teaching,

" The discharge planning activities we practice most is the patient teaching."

The researcher, therefore, shared with the nurses the meaning, characteristics, and factors related to discharge planning practice. The nurses were concerned about their practice and felt uncertain if this practice appropriate for critical care unit like CCU. Several questions raised by nurses were as following:

" What strategies or activities should we follow?"

" How and when we get start discharge planning for the CCU patient?"

"I wonder if we have time to do discharge planning?"

" Can we do it interdisciplinarily in our ward?"

" Is there any guideline for practice, if we have some guidelines, it will be easy to do."

These questions reflected to the researcher that the nurses perceived discharge planning practice is not an easy task and there are many things to be concerned.

Finally, the strategy to practice was also suggested by the group, as shown in the following sentence.

" Why don't we look back to our daily practice and explore what we have and what we have not.. and start from that point."

At this moment the working group made decision to explore their daily practice and tried to understand the relation of their practice with the discharge planning process. The group realized that cooperation from nurses is vital. They realized that they should start by asking all nurses simple questions regarding discharge planning practice. The working group also agreed that it was necessary to have patient and their family members shared their problems and needs. The working group learned that some of discharge planning activities they used to perform were less relevant to health care needs of the really critically ill patient, and that they should provided care to meet needs of the patient.

The interview guide used to explore the current situation of discharge planning and problems regarding to discharge planning was composed of two questions:

1. What are the problems related to discharge planning in our setting? (our ward) and
2. What need to be done about these discharge planning problems?

There were many other issues raised during exploration of the discharge planning situation, including what role and activities the nurse should play, what is the difference between patient teaching and discharge planning, when discharge planning should be implemented in critical care setting, and whether or not the basic knowledge and experience of nurse sufficient for doing discharge planning.

For the first question, "what are the problems related to discharge planning in our setting?" the problems raised by nurses were summarized in diagram 1

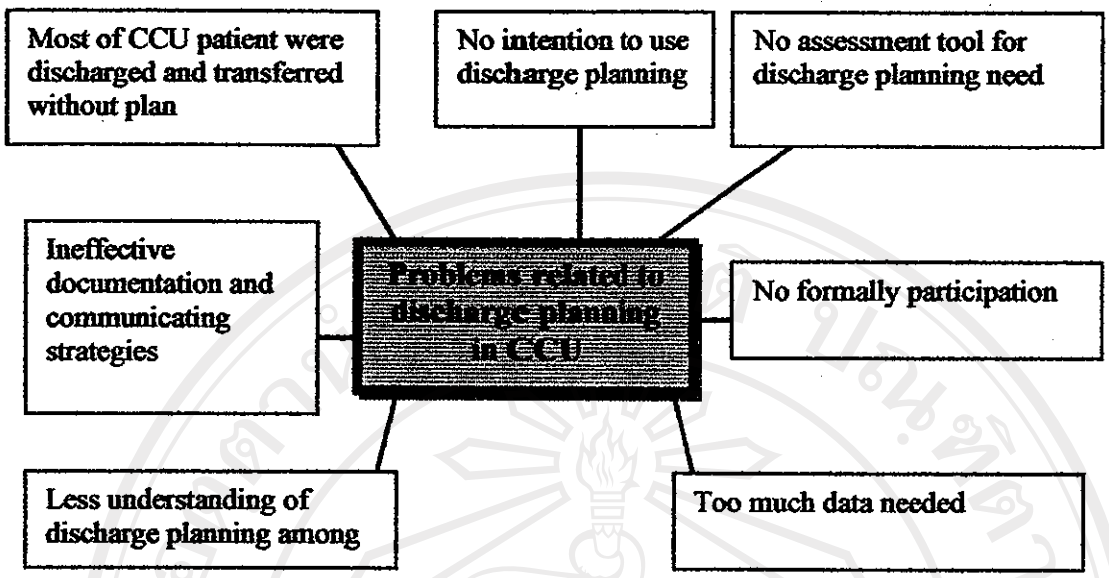


Diagram 1 Illustration of the CCU discharge planning problems

For question 2 'what should be done about the problems?' the nurses gave the answers based on their experiencing knowledge and reviewed related literature of nursing practice. The activities mentioned were shown in diagram 2

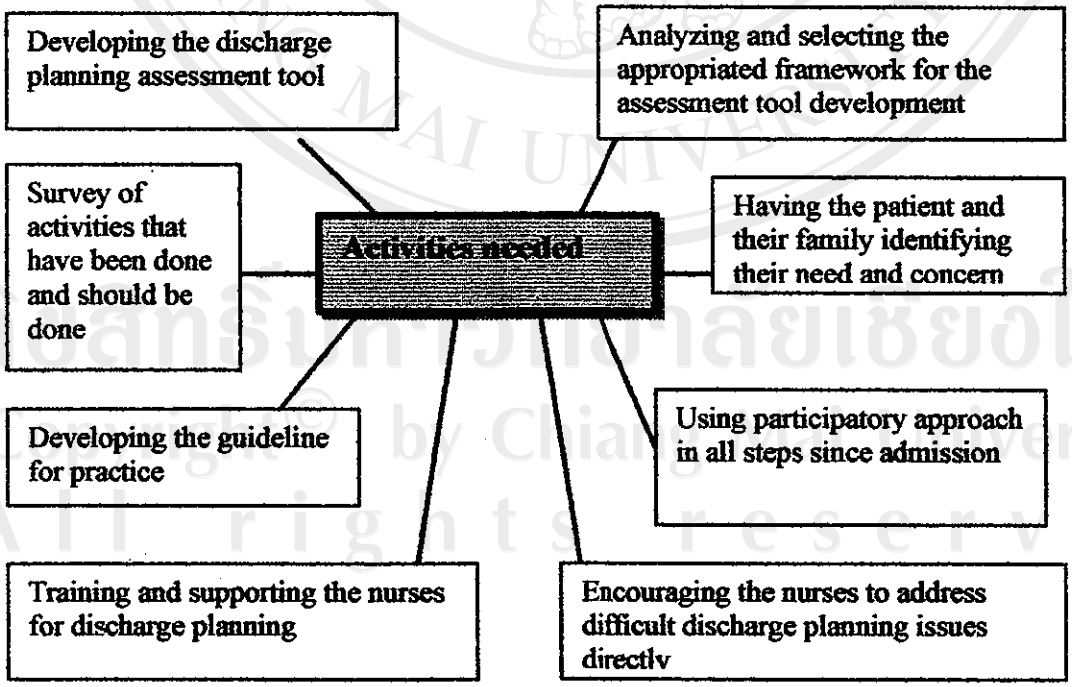


Diagram 2 The summarized activities needed in the process of discharge planning development

Data from discussion revealed that after they realized what the existing discharge planning problems were and what activities should be promptly started, the research team should establish the interview guide for further exploring the discharge planning situation which findings would be used to develop the assessment tool development.

The research team then worked through the action research spiral, collecting data on the current nursing practice. Data were obtained by interviewing the senior nurses of the department and CCU nurses and reviewing of documentation including nursing care plan, all patient's records, and medical records. Evidences for an existence of discharge planning as mentioned earlier were found in hospital policy, and practice guideline. All evidences were recorded and concluded during group working.

Moreover, data from interviewing with CCU nurses revealed the interesting opinions. As CCU nurses shared their opinions after the researcher raised the topic for discussion, "*How do you feel about discharge planning in CCU?*"

> *" Is the word "discharge planning" fit for this characteristic of care in our setting?"*
>
> *" If this method of practice (discharge planning) named in another term, it will not be confusing like this..."*
>
> *" When I heard the word discharge, it meant to me that the patients might be discharge to home or left the hospital..."*
>
> *" We have already had the discharge plan form (Nurse's discharge note) from the Nursing Service..."*

One interesting data found during group discussion was that there was very little participation from family in patient care. One nurse expressed her concern,

" In critically situation of illness, we always concern about the patient's condition, we often forget the important point... that family members needed to be assured that the patient is receiving the best possible care."

" In the aspect of family members involvement, we always ask the family about the patient's condition... in assessment step... but we do not have them involved in planning of care for patient."

The review of documentation from medical and nursing records

To confirm the problem regarding discharge planning and in order to find out the recorded discharge planning, the research team conducted a situational survey. The survey form was used for reviewing of documents from both medical and nursing fields. This survey form was developed on the basis of clinical experience and with reference to the literature concerning discharge from CCU. The main areas of interest were nursing problems identified in the nursing care plans, details of home or next level of care setting, nature and frequency of help given should be done after discharge or at home, and patient education provided by any care providers. In addition, the specific care for each problem was also included in this survey.

Data from various records reflected that very little information about discharge planning available. This finding showed that the records were incomplete and it was difficult to see how nurses can possibly communicate effectively about discharge planning, especially the use of documentation for communication. Confirmed by data from the researcher's observation, nurses only used verbal communication with patients and families. Most nurses realized that they only have access to incomplete records. The conclusion of this data gathering revealed that although there was only little information obtained from recording forms, it did not mean there was no

discharge planning activity. This finding made the working group realized the limitation of existing documentation. A few problems related to discharge planning appeared in the care plans, and there was hardly any evidence that patients were prepared for discharge or transfer.

Findings from nurses' notes revealed that the process of discharge planning occurred only when patient's discharge was ordered. Minutes recording of medical nursing service section were also revealed. The record revealed that discharge planning should be done during hospitalization, but it was found in fragmented activities only when patient was discharged home. Little information such as the date for follow up and medical prescription was found in the record.

From the researcher's observation during every day practice, nurses integrated discharge planning practice into each step of nursing process. These activities confirmed data from documentary survey that discharge planning was appeared as fragmented practice. Furthermore, the policy and structure of discharge planning were revealed in official documentation as well as from verbal communication with some senior nurses. However, data from official documentation showed only that there was a discharge summary form.

Little evaluation of the nursing records took place since many records did not meet the criteria for evaluation of discharge planning activities. The main evidence of this survey was shown that there was no tool for assessing discharge planning needs. As a result, there was no discharge planning process presented. Although nurses said they were employing the nursing process, the evidence from nursing record revealed that the cycle of assessment, planning, implementation and evaluation is often incomplete.

Triangulation method has been used to combine data pertaining discharge planning from various sources such as document analysis, interview and observation. This method served as alternative of validation of the findings from survey. Data found from record survey were summarized and showed in table 2

Table 2

Summary of discharge planning activities from various sources.

Discharge planning activities	Sources of Data		
	Interview	Nursing records	Medical record
1. Assessment Risk identification	✔	✔	✔
2. Nursing diagnosis Identifying (discharge problems)	✔	-	-
3. Client's participation	✔	-	-
4. Client's teaching	✔	✔	✔
5. Evaluation	-	-	-
6. Discharge summary *(Discharge home/transfer)*	✔	✔	✔
7. Arranging for the next level of care	✔	-	-

Moreover, data from observation confirmed that although the nursing and medical records did not suggest that discharge planning was a priority for either physicians or nurses. Most of nurses and physician assessed and educated the patient and family just prior to patient's returning home or being transferred to another wards. The findings concluded that nurses consistently record the greatest amount of information pertaining to clinical signs, symptoms, and critical management, but less amount on discharge plan.

According to data analysis, it was confirmed that lack of discharge planning was a problem. Thereafter, the nurses decided to develop a discharge planning protocol applicable for CCU themselves.

2. Planning

The planning phase recounted the formation of the discharge plan. The plan included the activities for discharge planning and document which the nurses required to facilitate discharge planning practice. Activities in this stage were the team reviewing relevant literature of discharge planning practice and setting the drafted discharge planning activities.

For the discharge planning protocol development, one critical component of discharge planning the nurses in research team encountered was the expectation of time for discharge. Generally, expected time for discharge of patient from critical care setting was not definitely set. Traditionally, discharge or transfer of the patient to another setting was the physician decision. In this planning stage, the research team agreed that whenever the patient admitted, they also had discharge needs. Thus, since

admission the discharge planning activities should be started, then ongoing process of care should be followed. Moreover, during this study was conducted, there was not any guideline or plan or other document regarding discharge planning. The team, therefore, plan to develop guideline for practice, evaluation guideline, the assessment tool, and recording form.

The assessment tool

Because of the key process of discharge planning in the unit included the discharge needs assessment, which included a strategy used for identifying patients with the high risk for readmission or patients who have difficulty conditions, the assessment tool was developed. The research team established time lines for completion of the tool development stage, planned to have meeting every two weeks until the plan completed. Members were given assignments to prepare for each schedule meeting.

The research team reconsidered the previous guidelines of practice for cardiovascular patients and developed initial assessment tool of discharge needs. At first, the team encountered with the uncertainty in conceptual framework used for developing discharge planning assessment tool. The research team considered that the cardiovascular patients often have problem related to their activities. Hence, the team decided to use the concept of activity of daily living as the framework to develop assessment tool. The content of the activity of daily living included the following categories; assessment and monitoring of each patient' s identification, self care risks before admission, mental state, social risks, economic risks, conclusion part

of risk identification, and goals of discharge planning or continuing care (Appendix C).

Although functional health pattern is the framework which worked well for guiding care for patient, it has some limitation for use in discharge planning. The working group thus decided to develop another assessment tool. On-going discussions in order to develop the documentation were conducted. Initially the team felt that they did not have enough information about discharge planning and felt uncertain about performing the activities. However, the researcher had provided as much information as possible and also facilitating, and support, the nurses got convenience and were certain in doing it.

To set up a discharge plan for an individual patients, the nurses agreed to follow the Rorden and Taft guideline. The three steps based on Rorden and Taft (1990) were used because it is simple and easy to understand. These steps consist of assessment, building a plan and confirming the plan, and step-by-step strategy for constructing the discharge plan. It was accomplished through the organization of easy-to-use forms on which to record patient information that reflected the progress of the discharge planning process. Moreover, it offered user very comprehensive lists of the kinds of information that could be important to successful continuing care.

The process for providing care for discharge planning in CCU based on Rorden and Taft (1990) involved three basic steps to guide treatment from admission was illustrated in diagram 3

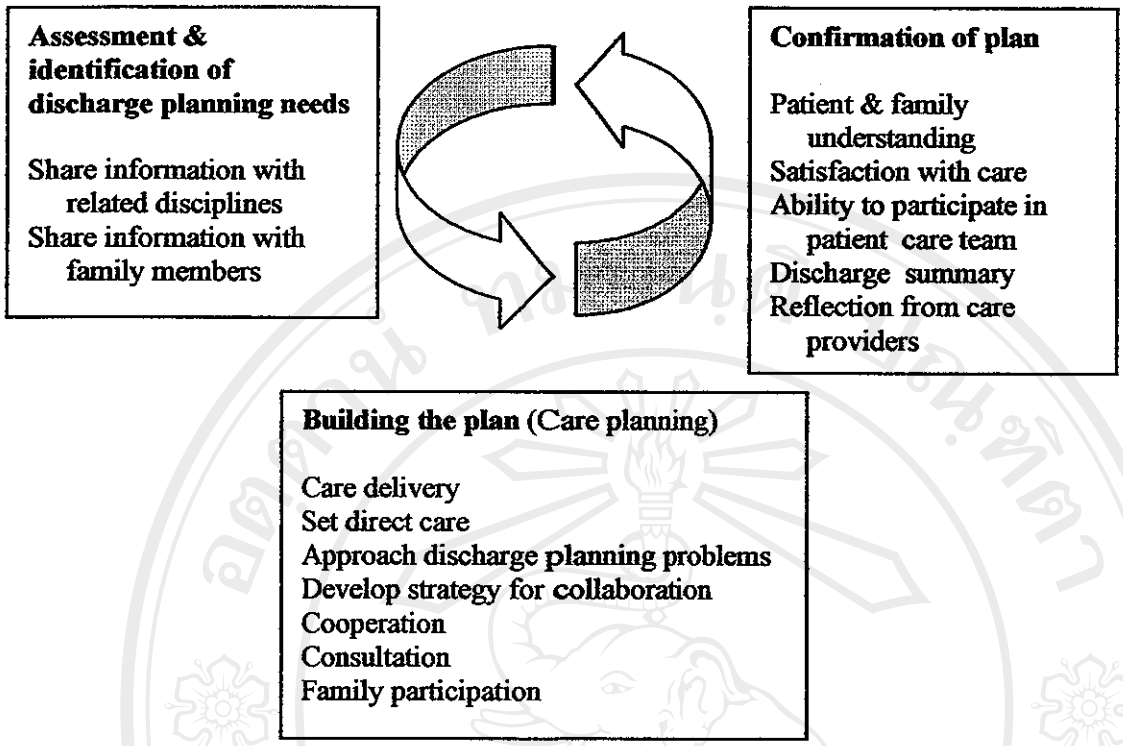


Diagram 3 Illustration of discharge planning process for individual patient

The first drafted of assessment tool needed to be clarified among all team members. Because in the real situation, especially in critical care unit while the patient has cardiovascular critical illness and is admitted to CCU, emergency care required first, the discharge planning is infrequently of practical concern as mentioned by the members;

" I never think about discharge planning at the first admission of patient"

" When I heard the term... ' discharge planning' ...I think of the patient's going back home...and it means the job is finished....and it will not easily happen in critical care setting like this..."

" In my opinion, discharge planning is the doctor's decision."

" Is it possible for patient or family to share their decision of care in critical care?"

" It is not certain whether patient will survive or not, so discharge planning is unnecessary begin upon admission.... "

These opinions showed that due to the traditional nursing practice the critical care nurses were seldom aware of continuing care. However, after a review of their own practice, the team made a conclusion that the discharge planning was necessary for critical care. The team then developed assessment tool for discharge planning that consisted of three major parts,

1) Risk screening which included ability to perform physical activity, exercise and rest, nutrition, medications, psychosocial status, financial status, communication ability, and needs for continuing care. In this part of the tool, family member who provides caring for patient should be identified. This part needed to assess within 24 hours since admission.

2) Goals for discharge planning and intervention needed that included skill for living with cardiac diseases. This part includes the daily practices. Critical care intervention guides for nurses are available in the ward.

3) Summarization of patient problems. Care need to be done on the next level of care and discharge summary should be completed on the day of discharge or transfer.

Strategy for practice

During planning stage, the research team considered the practice strategy for all members. Since discharge planning practice always starts on admission, it could be appropriate for primary nurses to carry this task first. The discharge problems

would be presented during ward pre-conference session every morning. The team also set timeline for action and tried to collaborate and share patient problems with other disciplines.

Before the implementation of discharge planning, there was neither care pathway nor any timeline set for CCU duration. Traditionally, discharge activities and summarized patient problems were used once discharge or transfer was ordered. Considered timeline for CCU patient, the team used expected date for some group of patients as a guide to plan for discharge planning or transfer from CCU.

For patient who has acute myocardial infarction without complication, the length of stay is usually three days. On the other hand, it take about five to seven days of CCU period for more complicated case. Hence, the conclusion was made for set time for CCU discharge planning within this period.

Another group of CCU patient, heart failure patient, was needed to reconsider when discharge planning was applied. Since the clinical problems of heart failure patient who was admitted to CCU were so complicated, the team established a timeline for discharge planning to be one-week duration and plan for reassessment the patient's problem.

Strategies for approaching the patient and family in critical care setting

Patient and family approach was another task the team reviewed. Since CCU is a critical care setting and the patients in this setting has self-care ability deficiencies, family members were considered to be the most significant people to approach. However, from nurse's experiences, when a patient is admitted to the

CCU, the family may be thrown into a state of crisis in which they experience a grief reaction characterized by shock, disbelief, disorganization and anxiety. In this situation the nurses are a vital communication link between the patient and the family, providing reassurance, support for family decisions, and information about the patient's status and well being.

Most of the team members have experience with the family crisis and intervention theory. They reflected from their experiences that critical illness affects and produces shifts in family equilibrium. Having a family member being critically ill in CCU represents a sudden crisis event, without time for preparation. The family, therefore, needs help. In order to support the family member to maintain the ability to cope, early and appropriated intervention should be used so that the individual can emerge as a stronger person. With the family centered care principle (Henneman & Cardin, 2002), care providers should know what the needs of families really are. The responsibility of the team is to support family members as well as the patient. It means care providers have an obligation to meet the three basic needs of the family: the need for information, the need for reassurance and support, and finally, the need to be with the patient. The team established appropriate ways for practice emphasizing supporting family members to satisfy their needs. Thus, the former teaching plan was revised. Information was provided throughout the care strategy starting the day of admission and continuing until discharge.

Together with the process of group working, the researchers explained and shared their understanding of the process of action research. The research team agreed that it was appropriate to study and conduct research during the time the quality assurance is implemented in this hospital. At first, some members of the

research team expressed their familiarity with some activities in this research process. This research process was like the continuous quality improvement process and the change process, which were used in the ward. Most of the team members responded after realizing that the tasks would be done in the study of discharge planning development that:

" I already did that... it's like the way of our daily practice"

" We usually do this, but it was not a research report."

" This way offers us a chance to make more use of our practice.. this practice can be done as a research methodology"

While one of the members said that:

" This research process is similar to the quality improving process we have in our hospital."

Although the research team was familiar with the research process, it was necessary for them to understand clearly about the differences between the research process and the quality improvement process. The researcher, therefore, clarified for the team some aspects which are the distinct differences between the research process and the quality improving principles. Although the design of some quality improvement projects may be similar to clinical research, the focus and goals of study are differ. Quality improvement provides steps to assess, plan, implement change, and evaluate results connected to an organizational process, which reflects an internal organizational concern. On the other hand, this research is focused on gaining new knowledge within a scientific framework.

Members were also trained in relevant research tradition. The 'thinking and action' skills have been practiced in a manner that was meaningful to all participants

in the research team, so that everyone understood and they were capable of upholding empirical rigor. The nature, timing, and structure of this training was a collaborative and purposive decision to ensure that all team members had knowledge and skill to be valuable contributors to develop a discharge planning protocol.

The research team studied the discharge planning development process together about three months. Most members were familiar with some activities in this research process, the continuous quality improvement process, and the change process. The group agreed with the fact that this research process in their own organization can offer opportunities for exploring links between what we have known from nursing education and the method used in real life practice. This research process also enhanced identification of options, assisted decision making and engaged organizational members in on-going reflection and feedback and they were better able to meet our desired objectives. In addition, there were two quantitative projects that related to discharge planning practice in CCU which emerged during group working. One was "the Discharge Planning Practice in Coronary Care Unit" and the other was "Satisfaction with Care of Patient and Family after Receiving Care from CCU." These projects were used for monitoring progress during one year of this study.

Responses from co-researchers about action research tradition showed to the researchers that all research team members were familiar with the process. Thus, they can do the practice without difficulties.

During the stage of planning, the team discussed and critiqued the critical care processes, which included the following care activities: procedures and tests, treatments during critical care, medications and intravenous fluid, nutrition, patient and family education, specified continuing care needs, and psychosocial/emotional/

spiritual care. Through the process of group interaction, the ward's current practice standards or guidelines were used. In addition, methods of protocol implementation were considered. The team began to formulate practice strategies. Their concerns about practice were showed below:

> *" If the appropriate discharge planning should be done immediately beginning at admission, it needed to follow some kind of guidelines or follow the care methods.."*
>
> *" Also the record form to assure that what we have done or the documentation form should be revised... "*
>
> *" When should the education plan be started and which patient education strategy is suitable for CCU clients?... From my experience, I have difficulty approaching critically ill patients and their family"*

The team discussed how the discharge planning protocol would be carried out. Strategies for practice which emerged from the team members are shown in diagram 4

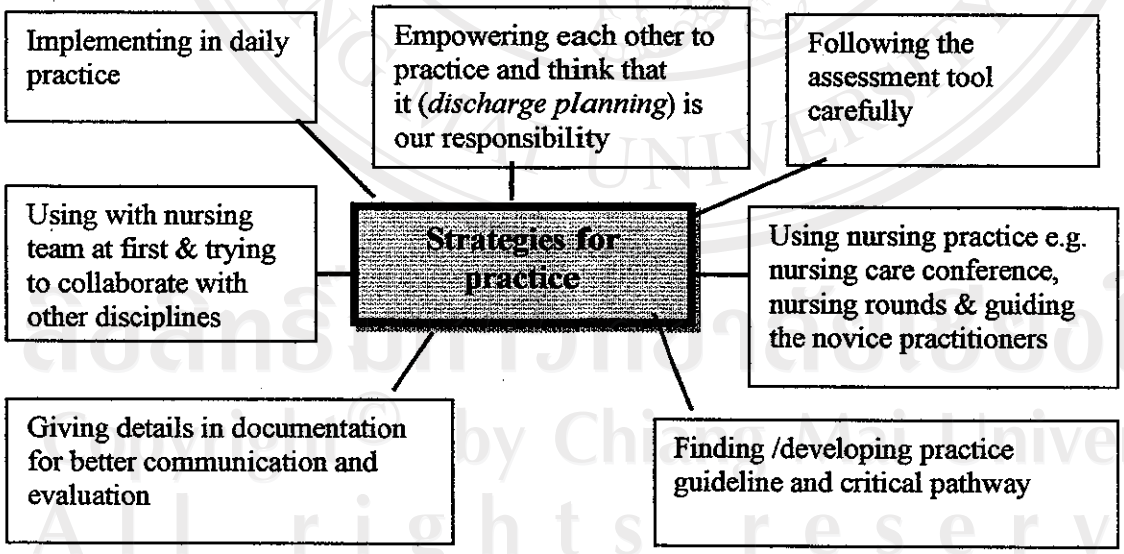


Diagram 4 Summary of strategies for practice suggested by the research team

The discharge education plan not only contained the content of general information of CCU, patient illness and risk of health problems, management, nutrition, medication, activity and rest, resources available such as social worker and community resources, but also included strategies to approach the family during the crisis event and the education plan.

Although the research members recognized that implementation of the discharge planning needs many activities to perform in a short period, the research members expressed their intention to pursue. To implement discharge planning with the patient with complex critical care needs in CCU, the research members agreed to use the following procedures:

1. Sharing the strategy for practice with the nursing team first, with a concern to individualized patient.

2. Guiding the novice nurses and nursing students about the method of practice during routine practice and consulting or sharing patients' discharge needs as possible.

3. Recording what has been done and what should be done.

4. Empowering the nurses to use discharge planning guidelines.

5. Performing the discharge planning to all patients being admitted.

The planning stage took three months to complete. The major results of this stage were an inpatient discharge planning protocol and the on-going process for developing strategies to practice.

Implementation

The implementation phase included using discharge planning with 425 patients and family members in CCU with the mechanism to ensure that the patients were out of danger and ready for discharge or transfer. This stage is the process of action and observation. Members of the research team engaged in the planned actions and collected all information regarding discharge planning in CCU.

The plan for action developed by the team was a tentative and provisional in nature which was very flexible and open to change as circumstances required it. Implementing the discharge planning was the process that was fluid and dynamic, requiring instant decisions about what needed to be done and exercising practical judgement. The implementation of the action plan assumed the character of a material, social and political struggle toward improvement. The implementation of discharge planning protocol began in the second cycle of action research.

At the beginning of implementation stage, a member of the working group presented the tentative Discharge Needs Assessment Tool to nurses working in CCU in the ward's monthly meeting, during shift change report and ward pre-conference. All members were asked to evaluate and comment on this tool by informal dialogue or by writing down their comments in the assessment tool. Barriers to the protocol utilization, problems raised and suggestions were also made and were used to revise this protocol.

The comments from nurses after trying to perform discharge planning were that the assessment tool is quite long, so they could not complete early in admission. Since two assessment tools: functional health pattern and the Discharge Need

Assessment Tool were used at the same time and both need to be completed it since admission, the nurses had a lot of difficulties. The discharge need assessment tool was critiqued for it difficulty and time consuming.

The nurses' concerns on the timing and the difficulties of using discharge planning protocol were as the following statements:

> *" Using this plan causes me trouble with the timeline.. it should be started within 48 hours of admission to CCU to have enough time to formulate the problems and plan of care."*
>
> *" I have difficulty in approaching the critically ill patient and in family education"*
>
> *" This initial assessment is difficult to complete early on admission....the recording form should be short,...."*

On the other hand, most of the co-researchers expressed their feelings about practice as follows:

> *" It is better than the practice we used to do, ... if the guideline were short it would be better."*
>
> *" At the beginning of using this protocol, I felt it was too long and difficult...but I hope that it will be shorter and easier to use when the plan is revised."*

The difficulties may result from lack of skills or experience in assessment and also may result from doing two assessments for different purposes. The research team realized that the first draft of the Discharge Planning Assessment Tool was inappropriate and decided to revise it. The protocol remains the same but the assessment form has to be reconsidered and perhaps modified. The team planned to enhance the nurses' assessment skills and provided supports to them.

It was agreed that if the nurses could not do discharge planning for all patients, they could prioritize the group at risk such as AMI and CHF. Also, the nurse could finish the discharge planning assessment after 24 hours.

During protocol implementation, the working group took the roles of consultants, participants, observers and facilitators. Support and encouragement were continuously provided to the practitioners. The researcher monitored this process by writing anecdotal notes and setting reflections from the practitioners, listening to the comments of the members, and observation of group working and behaviors. The implementation phase was informal and relaxed. The working group and other nurses exchanged their experiences and encouraged members of research team to critique and contribute each aspect of care to the team.

The research team had several tasks ahead of them. The most important of which was helping clinical nurses in the ward see the need for discharge planning practice. The team had to help them understand why their discharge planning practice was so important and how these changes enhanced our professional roles and also gave them the tools needed for doing this work.

Designing and implementation of a discharge planning protocol in this study required one year for implementation. By including the success factors applicable to each stage, a framework for the implementation of a successful discharge plan was developed on a consensus of what constitutes the discharge planning practice. Case conferences and nursing round sessions were the periodical activities that allowed the team members to share their experiences and facilitated each other in order to ensure discharge planning practice. These sessions also provided the researcher time to assess the team's understanding.

The researcher also did the participant observation. The observation plan used was flexible and opened to record the unexpected. Care provided during the patient's admission, the assessment, the care providers and clients' interaction were observed. Collaborative approach following the action plan was also observed. Reflection on action and practical problems concerned with discharge planning were used and team empowering was encouraged.

The researcher observed the health care personal used the protocol and the guidelines. Field notes were used to obtain more details for drawing conclusions. The observed data were continuously recorded as a researcher's field notes. These were also used for the analysis and evaluation of practice changes.

Implementation of discharge planning was most likely to be successful when the decision to develop it was made on an organizational basis. The comment from a senior nurse is on the necessary activity the research team needed during practice. During implementation, revision of the plan and obtaining participation from the clinical nurses was performed incrementally by the team through regularly held meetings. The revised plan was evaluated by three experienced CCU nurses.

To conclude, two major problems occurred during implementation, the first was the lack of a proposed discharge date or critical pathway for providing activities. It was a common issue the research team raised and discussed. "How will we follow through?" Response to this problem, the team set an expected date for discharge and planned the discharge process based on the results from a study with the uncomplicated acute myocardial infarction patient to be five days for CCU period. Another problem was "how to record what happened, during discharge planning?" because there was no discharge recording form in the setting and the hospital had only

the nurse's discharge notes for recording only activities done on the day of patient discharge from hospital. The team decided to record this aspect of care in the nurses' notes.

Evaluation and reflection

The evaluation phase involved the mechanism to ensure that the discharge had been implemented as applicable for the context of CCU and resulted in the anticipated outcomes. Group members in the research team met to analyze the data and their experiences in participating in the action stage. Reflection from observation was another process to evaluate discharge planning practice. Reflection was usually done by discussion among members of the research team, and the group reflection led to the reconstruction of the meaning of the social situation and provided the basis for a revised plan. Reflection had an evaluative aspect and re-planning was the next step to be taken.

As agreed upon in the previous step, the research team conducted the inquiry as planned. In this phase, it was critical that the team met regularly to evaluate the process and to make changes as needed. Criteria for ensuring strict standards need to be upheld throughout the research process through senior nurses debriefing sessions. The main criteria to evaluate were the continuing practice of discharge planning activities and their reflection on their practice.

Continuing evaluation was necessary in this research process using evaluation and reflection methods. Thematic evidence and data analysis was conducted independently by the researcher. Any differences in meaning were discussed between

senior nursing staffs and head nurses. Reflections from discharge planning protocol implementation were remained the difficulties of practice, while most nurses gain more understanding of discharge planning practice.

The problem of communication and documentation were the topics of common concern. Verbal communication that included significant aspects of patient care, and the patient's progress toward goals, must occur through shift report as well as unit to unit transfer. This information was also suggested in documentation on the patient care record. The research team learned an assessment tool was being mostly completed for cardiovascular patients in CCU. When patient was admitted to CCU, questions on the admission form were asked. CCU nurses reviewed the information and began planning the care based on data collected. Patients and their families reported that they had more confidence in the plan of care because they received more information of care during hospitalization and they knew the expected time to depart from CCU.

With regard to the research team's belief that communication is one the key components of effective discharge planning, how to build an effective documentation remained the issue of our interest once the protocol was implemented. Recording what had been done needed to be accomplished since the usual nursing records the ward used was only nurses' notes and the content to be recorded was the detail of clinical condition and care received during admission. When discharge planning was provided, it was impossible to fill it out in nurses' notes, as most of nurses suggested.

> *" It is good if we write down how much the family was involved in care in the medical and nursing record.."*

" In discharge planning, there should be some record of the steps that have already been taken and the linkages to the next level of care....because these records will demonstrate a reasonable effort to define the next steps in treatment. "

" Because our ward has no discharge planner or coordinator, the primary nurse who cares for each patient should communicate, discuss, and facilitate the linkage to the next level of care and other disciplines as much as possible ...so documentation is an effective communication... "

In addition, some nurses were concerned more about the detail of what needed to be recorded,

" The records should include the identification of personal, family, community, and other support systems' strengths to help them improve and maintain their usual lifestyles... "

" The records should include identification of a primary provider or a significant other who will be responsible for coordinating care... "

These perspectives reflected to the research team that it was appropriate to conduct the discharge planning in CCU. On the other hand, some facilitating factors should be revised such as the critical pathway and the appropriate recording form in order to share patient's data during admission. As one nurse's reflection in her daily discharge planning practice:

" Because our hospital do not have specific guidelines or critical pathways for guiding our practice...our planned goal of care and approaches often change... "

From evaluation, the research team agreed with the fact that the existing record forms were too short and needed more space to fully complete the patients' data and to record the care they received. The research team therefore, designed a new draft recording form for used in this study. However, when the new recording form was presented to the research team, a few members felt that there were too many

forms to be recorded in order to monitor various special treatments. One of the group members raised her concern and suggested for the new recording form as following:

> *" Nowadays, I realized that while there are many recording forms to be used, the nursing records is very few. Nurses' notes have only a small space to be filled in. If we looked throughout each patient's recording chart, most records were medical data. Although they are useful, little information was about the patient's condition. The nursing care and the critical care the patient received appeared brief or limited... If we have the new recording form that show the progress of patient's condition, it will reveal the patient's condition clearly."*

All members agreed with this opinion and shared their concerned about this topic. While the ward had no appropriate recording form, the group tried to design 'A temporary nurse's progress notes' for recording the progress of patient's problems. This form was used only in CCU. When patients were transferred or discharged from CCU this form would be summarized into the routine nurses' notes. The working group also developed a patient's problem profile and tried it out in real setting. This form was temporarily named 'A reassessment flow sheet'.

The reassessment flow sheet was composed of the main questions about the daily nursing care:

> *" Does the patient require critical care services?*
> *If so, what are the plans for a day?*
> *If not, what are the plans for discharge to alternate care/ home care?*
> *And if so, what is the acute care plan for a day?"*

These questions, besides being a guide for practice to ensure the patient will receive an appropriate level of care, will expand the recording form. Moreover, it provided a mechanism to prevent delay in the critical care process.

The advantage of these forms was that they were concise, requiring only a few check marks and could, in fact, replace some progress notes. The forms were useful to review each patient' s daily activity, to communicate the acute care objectives for each day to prompt action (critical care plan, transfer or discharge) if critical care was not required, and to identify reasons for delay during critical care hospitalization. This assessment would reveal if transferal were necessary. The importance of this information was highlighted once the patient's difficulties occurred.

Unfortunately, not all patients were able to return home after discharge from CCU. For these patients the new focuses on discharge planning meant they were identified resulting in preparation when discharge or transfer was necessary. Limiting delay or change of expected date ensured the patient was less likely to suffer complications.

There were some different perceptions between family members and staff regarding elements of discharge planning process. The family members perceived that the patients was in critically ill, they needed to be here with and needed more information about the illness, while the nurses did not have the family involve in patient care. These differences led to the inclusion of participant observation at the discharge planning meetings as an additional data collection strategy shortly after the study began in order to better understand the process as it was unfolding. Extensive field notes were taken at these meetings because the working group did not wish to have the meeting tape-recorded. Informal interviews with family members and practitioners who participated in these discharge planning meetings frequently occurred in order to clarify or elaborate the interactions occurred during the meetings.

In order to reflect the discharge planning practice, the team began to talk about their concerns about critical care discharge planning. Some members felt that although they knew they did these activities, when the clients showed appreciation for care they provided, they found that it was hard to describe what they were doing. Most of our members felt that discharge planning practice was lots of things they did without realizing they were discharge planning as shown by the examples of their difficulties after they recognized and understood what discharge planning is. Some of the group members offered their opinions as follows:

> *" We can make a very completed plan, but during practice we can't do well.. this means only the plan that we have in our ward."*

> *" We usually have little time for contacting patient and their family during CCU admission.."*

> *"It depends on patient's conditions... for some CCU patient, it is impossible to set a time to plan for discharge...."*

Monitoring progress and care was presented as an ongoing activity providing a continuous assessment of patient needs. This activity was carried out by formal procedures such as family caregiver assessment and home and community assessment. However, this data was only collected as informal exchanges. There was one quantitative study of Discharge Planning Practice in Coronary Care Unit which was conducted to investigate the discharge planning activities done by CCU nurses.

Reflection from the revised plan implementation confirmed that discharge planning protocol is more appropriate to establish in CCU, but it required another strategies to facilitate appropriately, such as the critical pathway or practice guideline,

the recording system which available space to fill necessary components of discharge planning.

The research team started the third cycle of the research process by refining the discharge planning protocol and implementing this protocol to another groups of patient being admitted to CCU. After implementing the refined discharge planning protocol, the same problems in practice occurred. The critical pathway for specific group of patients, the appropriate form of recording, and the skill of practice for some new nurses who became the CCU nurses were not available. Therefore, through the research process, the team searched for a way to show how the other people do it and to explore ways in which the discharge planning practice can be done effectively.

Evaluation of this research cycle included the nurses' reflection of their perception regarding to discharge planning with the protocol they developed. The research team recognized that much of discharge planning knowledge belongs to the nurses. It appeared that experiences on the job are internalized as practice. Some members believed that their skills for discharge planning practice and their knowledge came from years of on the job experience, discussion, and reading about the subjects. They felt they drew constantly on different types of practical knowledge and wanted to understand more thoroughly how we acquired and used this. As one nurse express her impression;

> *" It depends on the admitted case and my practice experience.... in some cases I already know that this kind of patient needs discharge planning. "*

Furthermore, experienced critical care nurses who are experts in cardiovascular care gave their responses to the contents, such as the appropriate

processes for this setting and other relevant issues, especially the methods of practice. Consultations and discussions among routine ward processes were made to accommodate varying commitments and workload during working hours. They also took into account the client and family needs in discharge planning protocol.

All members preferred to continue practicing and reflected their concerns during group discussions as shown in these statements:

> *" At first, I was confused with this practice, it's about the method of practice I should do, while I also need to learn my critical care skills....now I learn from the team the method of discharge planning, so it possible to do it in critical care."*

> *" If the ward has an explicit guide for other type of patients like the acute myocardial infarction patient, cardiac rehabilitation program, I think I can do it well."*

> *" I have trouble with the method of sharing patient discharge needs during ward rounds and give a lot of information on the patient's condition,....and also I have trouble when a family member is face with a critical event"*

Another aspect of discharge planning is interdisciplinary practice. The team was concerned about how other disciplines should be involved. Some of the key nursing personnel in the working group also shared their role as members of the Complete Cardiac Care Team (CCC team) and argued that discharge planning is one among many care activities of that team. Therefore, if the discharge plan has already been drafted, the plan should be shared in the team discussion. Because of the complexity of the setting and care situation, it was very difficult for each discipline to set a time for meeting and to develop a discharge plan together. It would be better if members who provided bedside care to the patients and their families try to develop it first and then, share the plan with other disciplines.

The developed discharge plan contained three parts: assessment, a plan of care in CCU, and education and training family members. The plan should be patient centered as the focus of care. Before implementing the plan, an assessment will be made within 24 hours of admission. However, because of the constraints from the critical care setting and the results from trying out the protocol, the team allowed the timeline of assessment to be within 48 hours. During implementation, information about problems which might hinder discharge were identified and the patient/care provider was shared, discussed and agreement to the finalized action plan was made.

In conclusion, the tentative discharge planning protocol was purposed, discharge planning should be started within 24 hours of admission and should include all patients being admitted. The research team mentioned that whenever practicing, members should try to meet the three aspects of discharge planning presented in the assessment tool. Difficulties that occurred during practice have to be brought to attention and shared with group.

The group planned also to undertake an examination of the thematic concern and social situation, in order to define and describe both accurately, as well as getting all stakeholders together and deciding how much participation constitutes collaboration.

To this end, the working group refined a discharge planning protocol which not only identified the proposed discharge date but also had sections within it to be completed for all activities involved in the patient's care. The nurses undertook the initial assessment and asking the patient and relatives if he/she could identify specific problems relating to discharge and proposed date. This assessment would reveal if referral was necessary. The importance of this information was highlighted when on

one occasion a patient mentioned difficulty in each self-care activities. Some difficulties and self-care issues must be clear before discharge or transfer. If issues had not been identified, the discharge planning may have failed. Consultation and referral to another relevant therapists was also planned.

Later, the team tried to make several fundamental changes to improve outcomes for patients. The first was involving patients and families in treatment planning, identifying the types of services needed upon discharge, and providing support to assist in reintegration into the next level of care. The second was reallocating existing protocol from CCU to other wards to continue the process of care and the cardiac rehabilitation as the directed services and family support programs and draft the new approach for other group patient. The third was using a more gradual education program to ensure the patient and family participation in the discharge planning process and to prepare for follow-up services to ensure the implementation of a discharge plan.

Apart from daily practice, the team also planned to evaluate the feasibility of this protocol. Since this study involved both care consumers and care providers, the team expected improvements in patient care. Thus, at the end of the implementation phase the protocol needed to be evaluated in terms of the impact on the patients and families, staff members or clinical care team and the organization. The team set forth the methods needed to assess those impacts. Regarding patient and family, satisfaction with care received in CCU was measured and some focus group discussion or interviews with open-ended questions were also used. For the impact on care providers, the team used mainly the reflective process and results from a descriptive study of Discharge Planning Practice in Coronary Care Unit conducted

during a one year period. For the impact of the organization, the discharge planning was continuously evaluated to meet the defined population's needs, and to achieve the desired results. The continuous practice in daily routine needed to be observed.

Fortunately, during the beginning of the project, in October 1999, the hospital had a quality improvement policy. Many quality programs were developed and implemented. The Patient Care Team was one of the service tools all practitioners use to provide care to AMI patient. For the Northern Cardiac Center and Medical Nursing Service Section, the Complete Cardiac Care Team (CCC team) is the team responsible for develop and providing a care plan to all cardiovascular patients. Discharge planning will be integrated in the care plan.

Actually, the researcher was not really a member of the CCC Team, but she participated through the process of the CCC team developing. This team was initially formed by cardiologists and nurses working in CCU with the purpose of providing cardiovascular patient care throughout hospitalization. The care provided includes the initial recognition and management in the emergency department, management during the first 24 hours and after the first 24 hours, preparation for hospital discharge, and long term management. Discharge planning, patient teaching and cardiac rehabilitation are necessary care activities. The first task of the team was the initiation of a care plan for acute non-complicated myocardial infarction patient.

Some staff nurses in the CCC team also shared their roles and responsibilities with the discharge planning working group, thus, discharge planning and other planning of the CCC team could be done simultaneously. The temporary discharge planning protocol was developed and implemented since September 2000 and it still needs continual revision.

After the discharge planning protocol was implemented, evaluation was also done in terms of nurses' teaching activity and discharge planning records. Discharge planning protocol was provided to 425 patient and family members. The evaluation revealed that the nurses' teaching activities were increasing. The three highest prevalent areas were 1) providing knowledge of the disease, risk factors, symptoms, and complications increased from 41.00% to 83.88%, 2) knowledge of nutrition increased from of 30.0% to 74.07%, and 3) knowledge of treatment and continuing care methods increased from of 31.0% to 76.66%. Finally, discharge planning practice was change from of 36.00% to 78.22%. (Figure 3)

It was also realized that the team had to evaluate whether the ways they were practicing were the ways they intended to go and whether their practice was producing a positive difference for our patients. Only after accurate measurement were they able to assess the impact of the changes they were making upon the quality of patient care and outcomes. Both areas targeted for improvement including discharge planning practice and patient and family education were monitored through the nurse's record. This record ensured that the actions prescribed by the team are being implemented by all staff nurses.

Monitoring progress and care was presented as an ongoing activity providing a continuous assessment of patient needs. This activity was carried out by formal procedures such as family caregiver assessment and home and community assessment. However, this data was only collected as informal exchanges.

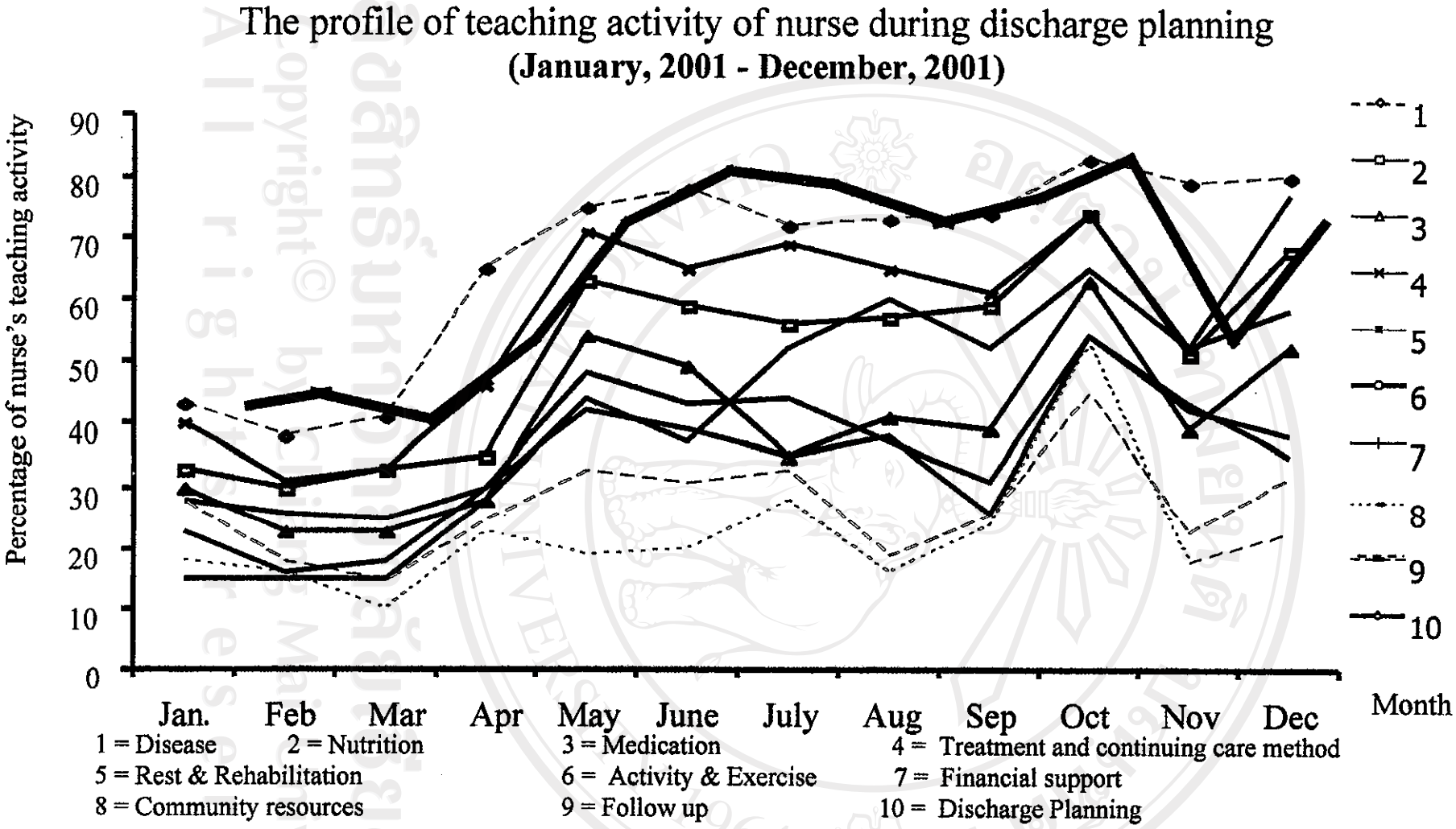
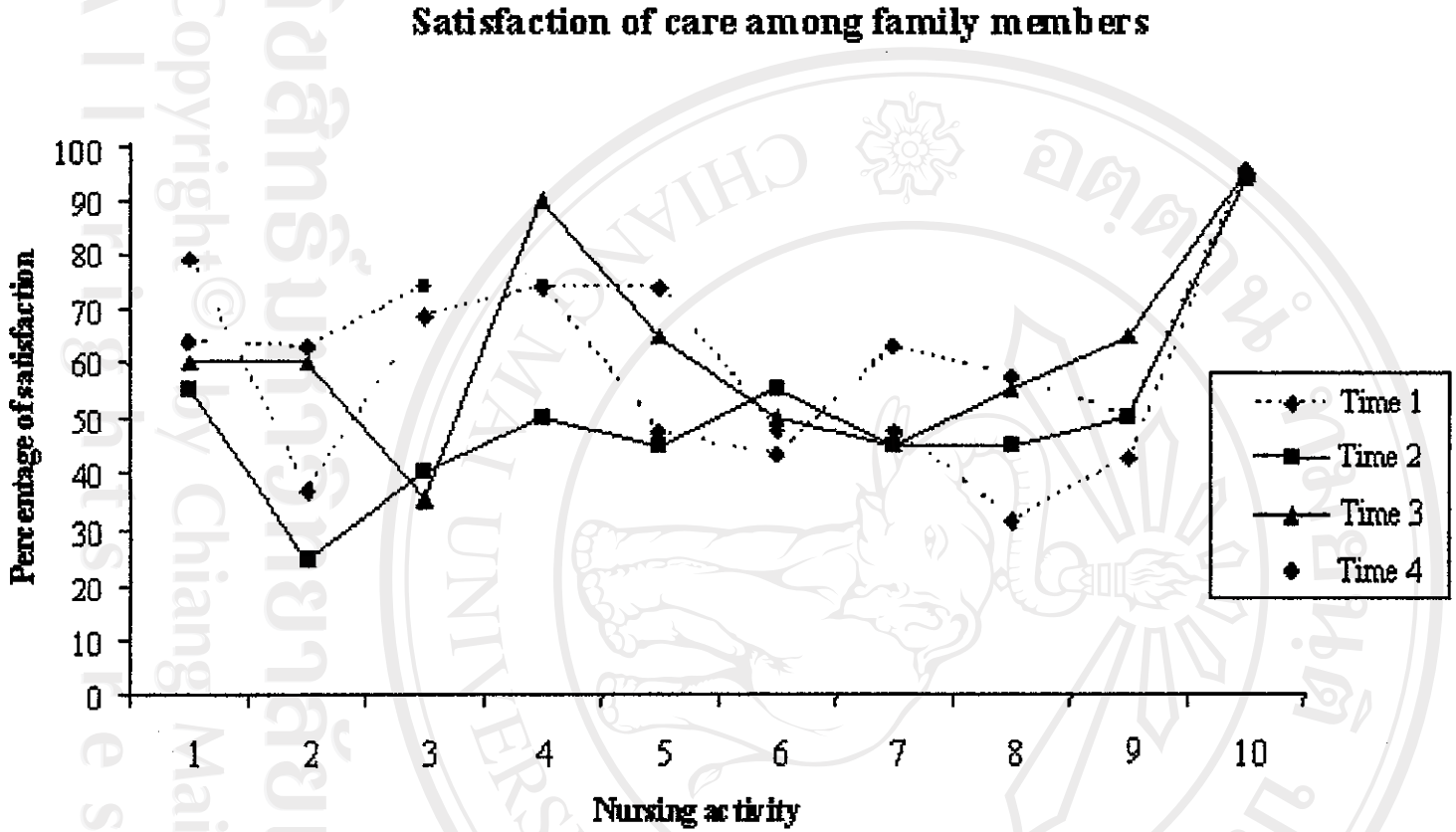


Figure 3 The profile of nurse's teaching activity during discharge planning

In order to monitor the client's satisfaction with the care, the research team agreed to use "the Satisfaction with Care in CCU Form" to monitor patient's satisfaction every three months. The tool consists of four parts including satisfaction with the ward environment, satisfaction with nursing activities, satisfaction with care related to respect of clients' rights, and satisfaction with the excellence of the nursing staffs' willingness to help and render prompt service.

The satisfaction with care after discharge planning implementation from ward monitoring revealed an increase in most aspects of care, especially in the part of nursing activities provided by the CCU nurses during one past year. Although the overall discharge planning did not increase in its percentage (94.00% - 95.00%), in the part of information related to their needed for continuing care shown a slight increase (31.58% - 57.00%) and the preparation for discharge /transfer to other setting also increased (42.11% - 50.00%) (Figure 4).



1 = Welcoming 2 = Orientation 3 = Communication 4 = Nurses' ongoing assessment
5 = Daily care 6 = Illness information 7 = Participation in patient care 8 = Self-care practice information
9 = Preparation for discharge and transfer 10 = Total satisfaction

Figure 4. The profile of satisfaction of care among family members

Qualitative data related to satisfaction with care were obtained to confirm the result from recording form. Data from an in-depth interview among some family members who were family members expressed their perception that they gained more information, received recognition from the professional, and received care prepared as the following statements:

> *" Illness is never avoidable for human beings...for hospitalized serious condition patient. I think the real condition of the patient was the family members need to know... now I think I have just found out that what will be the next plan of care for my father... I feel good about the information and care the CCU team provided.... Further, I think the cooperation between wards is also very important, I think this effective process is what the family members need ".*

> *" There was only a short period of waiting and observing my husband.... I do appreciate the CCU team. Nurses and physicians have much responsibility for their patients, I wonder if they feel any ...fatigue or exhaustion. I think certainly.. they do".*

> *" For my impression... I would like to thank khun..... for her kindness, she called me immediately when my husband's condition became serious and the physician had planned more procedures to be done, this means your team recognizes the family rights "*

> *" Information I got from your team is very good.....but I think I need more details about the surgery case". (family member of patient who has planed for vulvular replacement)*

This perception was also made from one AMI patient who has experience in the cardiac rehabilitation program:

> *" The CCU people were wonderful. I have the utmost respect for them. They helped in every possible way. I mean... and I can't... I could go on talking forever, you know, they did for me and they did help".*

The overall results related to discharge planning practice that emerged from this research were the discharge planning protocol and the strategies to develop and learning process of practice knowledge that develop from real situation.

At the end of one year of implementing the discharge planning protocol, the members of research team were interviewed in the aspect of the changing the discharge planning practice they had recognized. Interviews were randomly conducted during the last month of the implementation phase. As the researcher asked members how they understood these strategies of discharge planning with the main question "*What did we learn from our project?*" using the following three key questions developed by the researcher.

How do we understand the discharge planning as we developed and practiced it?
Why do you recognize that it was changed in our practice?
How do you feel about your practice, does it meet your purposes?

Upon the fully participation, some participants mentioned their benefit gained from being participants, learning about methods of practice discharge planning for CCU patients as described in diagram 5

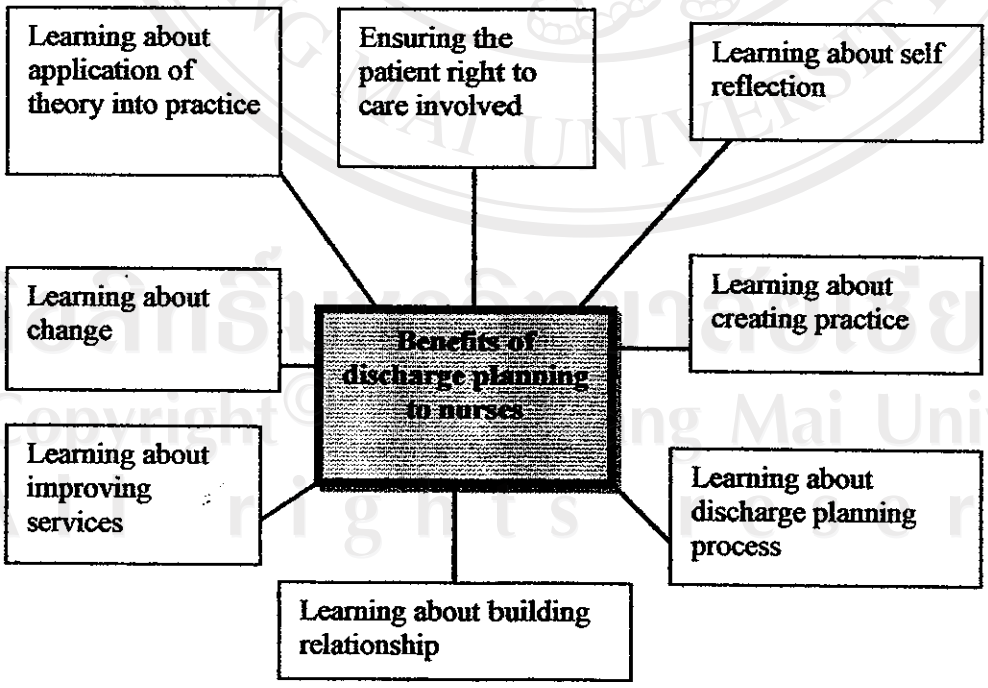


Diagram 5 Summary of the reflection from the research members

Through the application of participatory action research and the analysis of data, it became clear that the concept of discharge planning perceived by nurses was better understood. The process was flexible rather than static but was appropriate for each individual need. Most discharge planning process began on admission. The initial assessment while in admission varied according to the patient's severity and subsequent needs. However, basic medical, functional, social and psychological assessments were commonly performed. Finally, the researcher summarized and categorized the discharge planning activities, into three phases.

The discharge planning protocol

Phase 1. Assessment of discharge planning needs phase consists of the following activities

- Assessment patient's discharge planning needs and identifying patient's problems, the assessment should be completed within 48 hours.
- Reviewing the recent causes of admission
- Identifying risk factors for the difficulties when the patient was discharge from CCU
- Identifying for the relevant caregivers and patients
- Reassessment and monitoring patient's progress
- Identifying expected date of discharge for CCU patient

Phase 2. Treatment and critical care phase consists the following activities

- Providing care according to normal CCU practice
- Identifying the discharge planning problems
- Involving other disciplines to ascertain patient discharge problems
- Collaborating with other disciplines for specific problem of the patient
- Involving of other services as appropriate for specific problems with collaborative methods.
- Setting up the discharge planning with family participation and patient teaching

Phase 3. Ready to discharge /transfer phase consists of the following activities

- Assessment of patient's need for provision of continuing care and providing prescriptions for patient and family
- Informing caregivers and any other consultants about follow up, and need for compliance to treatment regimen
- Reviewing the plan for discharge/ transfer
- Completing transfer/discharge summary
- Transferring the patient to other patient care setting outsides CCU

The changes due to protocol implementation

The process of change after discharge planning protocol implementation perceived by nurses was evaluated in two major aspects, the changing in discharge planning concepts and the changing of practice perceived by nurses. According to the discharge planning concept, the nurses learnt from group reflection on their usual practice. This kind of practice was the patient teaching which had been done once the discharge was ordered. Also, reflection from most nurses revealed less concern about discharge planning in critical care setting. After participated in discharge planning protocol development, the nurses perceived that they gain more understanding of the overall process of discharge planning as shown by some nurses' statements;

" At first, I was confused with this practice, it's about the method of practice I should do, while I also need to learn my critical care skills....now I learn from the team the method of discharge planning, so it possible to do it in critical care."

" I never think about discharge planning at the first admission of patient"

Most of the nurses reflected that their practices need to have patient, family, and others disciplines involvement as early as possible. While the discharge planning

process was learnt among nurses, the practice strategies were initiated and practiced themselves, the on-going process of revising the care strategy for practice had been done. The nurses' perception of the practice during protocol implementation was the learning process of the application of their theoretical knowledge into practice and learn more about the method of improving their services as the reflections shown by diagram 5.

The changing process after discharge planning protocol implementation were described as the change of nurses' practice from non systemic patient and family members approaching, patient teaching before patient being discharged from hospital to be more systemic and comprehensive one. Being participated in discharge planning protocol implementation, the nurses learnt the methods of problem identification, initiation of practice strategy then put into action, and evaluated their practice themselves. This process is changing over time as a result of the PAR methods. Data from the profile of nurses' teaching activities and discharge planning practice during one- year monitoring revealed the gradually increased.

The discharge planning practice always started with assessment of patient needs followed by building the individual plan and summarized plan for continuing care. Reflection on their practice, nurses perceived their practice had been changed from functional oriented and inadequate sharing of knowledge to be more quality- oriented practice. As seen in the literature review the nurses developed many strategies to facilitate the discharge planning. Also, most of them recognized discharge planning practice is their responsibilities and included it in the nurses' team and the patient care team. Being a part of the patient care team, nurse reported that they can bring more about the discharge planning practice into real practice. The

better team working and more sharing of knowledge were presented in daily practice. Moreover, the nurses perceived that the discharge planning protocol is their ownership and feel comfortable in working.

Evaluation of the outcomes of this study included the outcome of each cycle and the overall process of care being practiced in CCU. A summary of each cycle following stages of participatory action research was shown in table 3

Table 3

Summarization of the discharge planning protocol development using the PAR method

Phase	Cycle 1	Cycle 2	Cycle 3
1.**Problem identification**	• Defining the concept of DP & exploring the existing practice problems (Group discussion)	• Suggestion from working group for framework of assessment tool (the ADL was selected), family - centered approach and family crisis & intervention	• Practice difficulties during DP implementation were presented & critiqued, the care strategy and problem with using assessment tool
2. **Planning of action** *what is to be done*	• Description of the methods of data gathering. • Assessment tool development. • Strategic guides for practice.	• Designing the assessment tool • Revising the education plan • Developing a drafted strategy for practice • AMI cases will be integrated in the complete cardiac care team	• Protocol development & refining with the three key elements, risk screening, time frame for action in CCU, and strategy to shared with other disciplines

Table 3 (cont.)

Phase	Cycle 1	Cycle 2	Cycle 3
3. **Taking action/ implementation** *carrying out the plan*	• Survey of DP evidence (interview, documentation survey, observation, group working for discussion & critique existing DP problems	• Project implementation during 1 year (Jan.-Dec. 2001) • Selected cases only AMI & CHF • Revised some strategies of practice • Family involvement in practice	• Most activities integrated into daily practice from the time patient is admitted • Being a part of complete cardiac care team (for AMI patient) • Included the patient & family participation
4. **Observe** *evaluate the result*	• The DP concept & actual practice are incongruent and presented in fragments of practice	• The team performed an ongoing evaluation of the feasibility	• DP practice is the ongoing process in CCU • Patient & Family satisfaction was monitored (ward's instrument & interview with family members • Reflection from patients • Co-researchers reflected their satisfaction & learning experiences
5. Reflect *findings*	• No tool or guideline of practice in CCU • Patient education is the only one of DP practices found • Education should be revised	• Care strategy is the appropriate tool for DP implementation • Recording form for discharge / transfer from CCU, ward's reassessment flow sheet • Strategy for collaboration	• DP protocol of CCU consists of assessment of discharge planning needs phase, treatment and critical care phase and ready to discharge /transfer phase

Discussion

Discussion of research findings from this study consists of the two major divisions, the discharge planning protocol and the process of discharge planning protocol development.

The discharge planning protocol

The protocol developed from this study was derived from the basic concept of discharge planning (Rorden & Taft, 1989). The protocol consisted of three aspects of caring process, assessment and problem identification, strategies for practice and the patient and family approach. This protocol used the time approach, starting with the assessment of discharge planning needs phase, the treatment and critical care and the ready to discharge/ transfer phase.

The discharge planning protocol from this study was based on the standard of health care practice for all patients who required treatment in secure conditions while critically ill and who required continual support to minimize risks of cardiovascular events. It was developed in the context of the relevant standard of quality assurance and accreditation of the clinical service, and in specific context of the critical care setting. The plan was developed from the basis for discharge, through care, and after care arrangement. The plan specified individual and agency responsibilities with the propose of involving all relevant interests and agencies at the earliest point in assessment, planning and delivery of care and support for those who meet the specific criteria. Application of the discharge planning protocol will ensure that the patient is

offered the opportunity of being fully engaged in the process, as ultimately a successful outcome is dependent in large part on the cooperation of the patient.

Many models of discharge planning were presented, yet little is known about their effectiveness. However, the common aspects of the model of practice were alike. Most of the activities depended on organizational discharge policy, care process with assessment of discharge needs, and the nurses who were able to make suggestions and develop an action plan for discharge to collaborate and facilitate the interdisciplinary work (Naylor, et al., 1994; Taraborelli, Wood, Bloor, Pithouse & Parry, 1998).

From previous studies (Anthony & Hudson-Barr, 1998; Bull, Hansen & Gross, 2000; McKeenan & Coulton, 1985 & Naylor, et al, 1999), most discharge planning activities were the responsibility of discharge planners/coordinators who mostly were nurses. It was also the same responsibility as was found in this research study. While the process and procedure of discharge planning was said to be undertaken in a setting, each patient was assigned to a nurse who was responsible for coordinating their care and discharge arrangements. This function is overseen by the team leader who was also a nurse. Ultimately, clinical responsibility for admission and discharge was the nurses' responsibility, while other disciplines were considered as consultants. This finding was supported by Pichitpornchai, Street and Boontong (1999) that the standards of nursing practice in the area of discharge planning had not yet been established in the Thai health care system. There were many discharge guidelines for nurses, however these guidelines presented mainly standardized activities at the time of the discharge event. Along with other ward information, discharge information was provided to patients, relatives and caregivers when the physician decided to

discharge the patient. These guidelines mostly included patient education. Pichitpornchai, Street and Boontong (1999) also mentioned in her study that discharge planning was perceived as one of the nurses' caring roles and responsibilities. However, this care process generally seems not to receive much attention from nurses in actual practice.

Before the protocol was developed in CCU, nurses tended to focus more on other aspects of care such as assisting critically ill patient, assisting the physicians with specific procedures and developing many quality activities. When discharge planning was implemented, the available time to practice was the main issue raised by the co-researchers rather than the collaboration with staff from other disciplines.

Assessments and problem identification

It is well accepted that good hospital discharge procedures required an initial identification of acute care needs and effective and timely referral for assessment at an early stage. This is the point at which the role of ward staff is most crucial and a significant measure of the quality of integration is achieved between hospital discharge and assessment and care management.

Discharge planning activities began with the assessment and problem identification. It was necessary to assess both patients and family members or other informal caregiver. Some hospital policies state that a number of comprehensive assessments should be undertaken within specified time standards (Taraborelli, et al, 1998) and should include a comprehensive assessment of level of functioning and ability to perform activity and a review of needs on discharge. Patients admitted for

critical care intervention also receive an assessment on admission to examine what the critical event of health the patients struggle with is or whether their needs have changed since their last admission period. Theoretically, documentation states that an initial nursing assessment should be done as soon as possible. In this study, the consensus from the research team proposed that assessment and problem identification should be completed within 24 hours and no longer than 48 hours of admission or transfer, and should perform a further assessment when the shift changes. The consensus, therefore, is acceptable.

Assessment and early problem identification of those critically ill patients who are 'at risk' in a discharge perspective is vital. Stryborn (1995) concurs that it is necessary both from a humanitarian and efficiency point of view. Previous studies suggested that the process of discharge planning only begins after their admission to a hospital ward (Jewell, 1992; Naylor et al, 1994). The hours and days following admission and the roles and practices of the ward staff during this time have increasingly been recognized as a crucial period in the process of discharge planning and care management for the acute or critical illness or vulnerable populations (Godfrey & Moore, 1996; Gregson et al, 1996; Neill & Williams, 1992; Townsend, et al, 1992; Victor, et al, 1993).

Strategy for practice

Strategy for discharge planning practice was a set of care practices in the protocol from this study. Soon after admission, the nursing staff is most likely to take the role of leader of the team for the assessment of the patients' physical, social and

psychological circumstances (Gregson et al, 1996; King & Macmillan, 1994; Lawson et al, 1994 & Ryan, 1994). This care process was the direct critical care nursing. Care providing was guided by the clinical practice guidelines which were the traditional care strategies in this setting. Within each phase of the protocol, a strategy to collaborate with other disciplines was mentioned. This collaborative part of the protocol is a vital part of discharge planning protocol. Although it is accepted that the team approach is the most appropriate way to practice, among most health care setting this means various forms of collaboration. Little success of discharge planning implementation related to the hospital policy with one or more components of the discharge plan inadequate or not being implemented and discrepancies were likely to occur among low income patients (Proctor, Morrow-Wheel & Kaplan, 1996).

The common method used in the discharge planning practice in this study was consultation. The nature of care in the critical care was usually done in the nature of collaborative way, especially between cardiologists and CCU nurses. Fortunately, during the process of discharge planning implementation, the hospital has set up a policy for hospital accreditation. The completed cardiac care team was formed and piloted with the AMI patients. Discharge planning protocol was integrated as one part of that team. The complete cardiac care team was the work of only cardiologists and nurses at the beginning, but other disciplines will be included if needed.

Considering the level of interdisciplinary team in practice with discharge planning process in the context of health care in Thailand, most of the activities had been done confidently by nurse with only the decision still being the physician's judgement. Collaboration between nurses and other disciplines on discharge planning from CCU tended to be superficial. Patient and family involvement suggested by

Rorden and Taff(1990) was the dominant part of care from this protocol. Since most of patients in CCU were critically ill, the family members were expected to become increasingly involved in the discharge plan. Using the concept of family in crisis and intervention, family members participating in the care process became familiar with Thai community and reflected more family member satisfaction with care during project implementation as shown by data from ward monitoring profiles and clients' perspectives from the qualitative data.

Another aspect of care using the discharge planning protocol is that there was no critical pathway to provide the timeline and steps of care during hospitalization. In this study, since there is no documentary evidence that a planned discharge date was identified, the research team agreed on using the expected date for discharge from CCU. However a patient's progress is discussed at weekly review meetings and ward meetings. Patients and family member should have a minimum of three days but preferably five days notice of discharge for non-complicated AMI and this time standard is confirmed on the discharge planning being integrated in the cardiac rehabilitation program. This strategy of practice agreed with the recommendation from many authors (DOH, 1998; Maloney & Preston, 1992; Scott, 1999; Smith, 1996; Zander, 1992) that the success of discharge planning would be found when it is implemented within the critical pathway or an integrated care pathway. Young (2002) also concurs that care pathway has the potential to reduce time spent on documentation, reduce the length of patients' time in the hospital through effective discharge planning, reduce practice variation and improve communication and collaboration within the interdisciplinary team. Critical pathway is clinical management tools that organize, sequence, and time the major interventions of

nursing staff, physicians, and other departments for a particular case type, subset, or condition (Zander, 1992). There have been numerous reasons acknowledged the necessary of critical pathway (Beaumont, 2000), such as enhancing communication between health care personnel and clients, being easy to use, reducing paper work, providing bottom up financial information, facilitating medical auditing, facilitating education and enhancing quality of care. Thus, the length of stay can be graphed on an axis against an intervention axis, and a very basic critical pathway describes a standard of practice. The research team agreed that if the critical pathway for each specific type of patient were available, it would provide an incorporation of clinical guidelines into the real practice. The critical pathway that the research team reflected was necessary to be initiated in this protocol was the patients' and/or family's baseline responses expected by the staff as a result of their practice along the same time line. Thereafter, the research team set forth for another tasks for developing or finding the appropriate critical pathway for specific group of CCU patients.

Basically, the critical pathway integrates all care activities for a patient. The pathway development is an integration of the best of what is known about health care delivery. Looking back, there were few distinct areas of experience that converged to precipitate the development of discharge plans (Zander, 1992).

Ward rounds and nursing care conferences were the most common issue raised during the implementation phase. Discussions regarding care and discharge plans remained the traditional issue during ward rounds. This issue was also consistent with the study of Tierney and Worth, et al, (1994), especially in acute medical and surgical wards. Although Tierney and Worth et al, (1994) noted, theoretically, ward rounds present an opportunity for professionals to discuss patients' progress and plans for

their likely discharge, the reality is likely to be very different for both professionals and caregivers. Ward rounds are mainly the responsibility of medical staff and are likely to be dominated by concerns over the medical condition of the patients. Opportunities for wider discussion are limited and the culture of these events may prove unpopular for non-medical or nursing staff. This may also explain the general reluctance of other related health care staff to attend ward rounds because it is time consuming (Davies & Connolly, 1995).

Tierney and Worth, et al (1994) strongly suggested that the ward round does not encourage communication between professionals and/or patients. They found these events memorable but intimidating. Suggestions from the interdisciplinary team approach are that interdisciplinary ward rounds will encourage the team to have mutual understanding of discharge planning. In this study, few co-researchers were able to report any consultation with staff concerning discharge and care. In the absence of a medical note of discharge planning, a nurse should make a progress report based on discussions with the physician. Further, as suggested by Ryan (1994), the work and culture of critical care may encourage the implementation of multidisciplinary meetings as part of the process of care and discharge planning. The existence of such a structure was widely reported as a sign of good practice in discharge planning (Ryan, 1995; Smith, 1996). These events could be performed in a variety of manners. Some may be routine events that complement or have replaced traditional ward rounds (Ryan, 1994), others are convened to discuss specific cases (Godfrey & Moore, 1996; Lawson et al, 1994). However, this finding rarely offer any detailed description or analysis of the ward rounds with the structure, but the research

team emphasized the content of critical care with nursing care conferences and some outcomes.

Nursing care conferences were a regular process of care for nursing. It is still the practice that is available for nurses in our research team to discuss and share each experience of practice regarding discharge planning. Sharing knowledge and experience among the nursing team is one method of practice that guided the novice to gain more practical knowledge as well as the nursing round method.

Effective discharge planning is dependent on a comprehensive information collection and dissemination system, especially when considering early discharge (Waters & Booth, 1991). Findings from this study revealed the limitation of how to record discharge planning activities in the former recording form, the nurses' notes. When the discharge planning protocol was implemented, both actual problems and potential future problems could be identified. Therefore, the care provided should have been recorded but the recording form has only a little space to be filled in. This problem of practice was raised during the spiral process of action research. Reflecting on this problem and using their own experiences, the group created a temporary recording form and revised the discharge summary/ referral form.

Following the initial assessment, the next step in the discharge planning process was screening out those individuals who have particular difficulties. This step needed to be addressed before a decision about the most suitable location of their discharge can be determined and/or before an appropriate discharge to their home can be authorized and implemented. Interdisciplinary working and communication was a major concern within this research finding. As supported by Ryan (1995) and Smith (1996), many service providers have recognized the need to develop structures to

facilitate team assessments of the clients' needs, consultation, and implementation of plans for future care and discharge.

Communication was a prerequisite for collaboration. It alone did not create a collaborative relationship but during this study, the practice contributed a little interdisciplinary collaboration in the use of discharge planning protocol. The development of this protocol required partnership with all disciplines involved in patient care. The goal-directed results of this study were the discharge planning protocol and the interdisciplinary plan of care that all providers followed, which could be customized to meet each patient's special needs. Documentation was one problematic part of the document survey. There was no documentary evidence that a planned discharge date was identified. Documentation was one of the focal points of discharge planning. However a patient's progress was discussed at weekly review meetings and at ward meetings. The team stated that patients, caregivers and relatives should have a minimum of three days notice in CCU, but preferably five days, of discharge for non-complicated acute myocardial infarction and this time standard was confirmed on the discharge plan and integrated into the cardiac rehabilitation program. However, since good record keeping standards improve care management and underpin risk management systems, documentation of the care activities provided is the important part that the team continues to revise. This finding is consistent with the study by Anderson and Helms (1994) that a written referral form is an important communication and should be developed to provide effective discharge planning. Also the Joint Commission on Accreditation of Health Care Organization (JCAHO, 1993) recommended that an intense focus on discharge planning is to include a means to monitor documentation.

Patients and family members were the vital parts of discharge planning mentioned by the protocol. This protocol included family member as a member of the research team for individual patient. This protocol also reported that the admission assessment which involves family members was possible. According to the family-centered principle (Henneman & Cardin, 2002), patients and their family members should be regularly and fully involved in discharge decisions and patients and/or their family members should be given the opportunity to attend case reviews. Participating in this study, family members reflected their perception that care received by CCU nurses satisfied them. However, there was little change in the percentage from the satisfaction of care monitored.

The discharge planning protocol form in this study represented as a linear process with clearly distinct phases, the admission phase, the treatment and critical care and the ready to discharge/ transfer phase. The process of care was in agreement with some authors (Bone et al, 1992; King & Macmillan; 1994) that discharge planning has four phases, patient and family assessment, development of an individual discharge plan, provision of services, including patient/family education, and service referrals and follow up /evaluation. However, the common elements that are in this study that practitioner should be concerned with are a relevant form, content, and timeline of referral and assessment. These elements could represent both the quality of discharge planning and collaborative working (Davies & Connolly, 1995; Phillipson & Williams, 1995).

The process of discharge planning protocol development

The outcome of the project implementation from this study was considered mainly as the process of change in nursing practice. Change of practice in relation to discharge planning was the picture that emerged from protocol implementation. It is the special role of the nurse.

A number of issues need to be considered in relation to bringing about change in practice. The nurses' ability to bring about change in discharge practice is their ability to collaborate with other disciplines. Unfortunately, this ability has not been stated in the nurses' job description which is a constraint to their work. The nurses' ability to perform appropriate strategy for collaboration in the role of discharge planner is underscored by the studies of Naylor, et al (1994; 1999). The clinical nurse specialist is the nurse role in their studies.

Besides the use of direct clinical care, the use of discharge planning protocol challenged nurses' abilities to find out the problem based on knowledge or the experience from previous situations which contribute to creating a strategy of discharge planning practice. As suggested by Greenwood (1994), the ability of nurses in the research team to carry out discharge planning practice will depend on not only on the knowledge level of the staff but also on the availability of appropriate resources including adequate time for exploring related problems and strategies to improve practice.

Although this project was derived from the PAR method, with the expectation of full participation from all stakeholders, it did not include all disciplines in the

practice. However, for the clients' part, this protocol gained full family involvement. There were many factors affecting the success of the protocol including the organizational structure with a limited team approach and the understanding of discharge planning. However, it was very fortunate that just we began this protocol, the hospital began the hospital accreditation program for quality improvement. The attempt to introduce discharge planning practice was considered to a way to facilitate change in the quality program.

Considered with the other outcomes from the protocol implementation, the general findings of the two descriptive projects conducted by member of the research team were that the process and activities of discharge planning practice and patient education demonstrated a gradual increase in the nurses' practice. There was a 40% rise in nurse is discharge planning activity and an increase in general discharge planning activities from members of the team. Moreover, in traditional recording, the discharge plan is contained only on the last page and is occasionally overlooked. After one year of this project implementation, practice associated with discharge planning was included in various parts of daily care process.

As for the satisfaction monitoring score, the overall satisfaction of patient with discharge planning did not show an increase in percentage (94.00% to 95.00%). Even though, there was very little evidence of an influence of discharge planning on outcome from statistical data, the qualitative data presented by patients showed positive outcomes.

There was little attention paid to the resources and categories of knowledge nurses and other professionals drew on in the course of their assessment activities. Similarly, the research team knew relatively little of the organizational and

professional contingencies that shaped initial assessments and the process of referral. However, the findings of the work that existed on this topic suggested that this stage in the discharge process warranted closer attention from practitioners, managers, researchers and those involved in the education and training of health professionals in this field.

In conclusion, the strategies of practice had been summarized with the agreement of the research team. Since the methods of practice were developed by the research team with the intention of integrating the discharge planning process into the daily ward practice, various strategies were proposed. The discharge planning protocol integrated structures of the unit-based communication system into a constant cycle of planning, action, and evaluation every 8 hours. It was inaccordance with the quality improvement which actually begins with the first component and proceeds through the other components of the system. During change-of-shift report, the total impact of the discharge planning protocol for each patient is reviewed and passed along through every shift by the nursing staff. Case consultation and health team meetings are often the interventions most needed when there is indecision or disagreement among the principal clinicians and, at times, the family and patients. Every patient has the right to such a meeting and ideally, every patient should have the privilege of undergoing the discharge plan. Continuous quality improvement through the discharge planning protocol is used not only in the concurrent management of care, but also retrospectively for continuous quality improvement. This is accomplished through discussing changes in practice or the institution's methods.

The process of discharge planning protocol development in this study differs from the other discharge planning protocols presented in the literature reviewed. The approaching of development is different. It does not devolve responsibility to one particular position. As a protocol for coordinating care, the practice considers that all practitioners in CCU have a role in the care of those requesting critical care service. The practice is also integrated with the normal team nursing. Thus, the critical procedure represents a protocol that recognizes structural constraint affecting the setting.

This protocol also highlights the difference from the others in that it was developed from the experience of nurses in the research team. The protocol development in this study started with most of the research team members not being clear about the discharge planning concept. Thus, the strategy used began with concept clarification among members of the team. Planning of care in this protocol included the cultural aspects of care within the specific context.

Most of our research team had the same perception about the word 'discharge planning'. They reflected from their experiences that this term was an unfamiliar term, especially in a critical care setting. From the previous literature, the team found that there was one recommendation from Zander (1997) for using the term 'discharge', because discharge planning is not the end, but rather beginning of another phase for the patient and so transition or continuing care should be used instead. Other studies that mentioned these terms were the studies of Naylor, et al (1994; 1999) and Picitpornchai, Street and Boontong (1999) on a protocol of transitional care and transitional care model. As for Naylor, et al (1994), their discharge planning protocol, the comprehensive discharge planning protocol, was done as part of the

advanced practice nurses (APN) role. With the advanced practice nurses' role, nurses were the Master's prepared APN specialists with advanced knowledge and skill in care of specific patient groups.

Generally details of discharge planning for each patient explain the relationship of sets of interventions for the intermediate outcomes along time line from admission and reflection on this practice. Clinical nurses agreed to use the existing standards of care for each group of patients. These standards provided care activities that were easy for the nurses to use in developing the discharge plan.

Summary of the protocol

Debriefing with senior medical nurses regarding the protocol concluded that this protocol is the only nurse driven discharge planning protocol. Although the major characters of discharge planning were considered during the process of development, in actual practice within the specific context of critical care, it was likely to be collaborative practice especially between nurse and cardiologist. Moreover, from the senior nurses' perspectives, this protocol would work well if the relevant quality activities within the organization were reformed. Most of them agreed that the recording form should be revised.

In conclusion, the discharge planning protocol emerging from this study was using process of participatory action research. Group reflection was used as important means of development. Reflection and discussion allowed the co-researchers to share experiences and knowledge, validate different interpretations of some activities or context, and develop greater awareness of the range of strategies

available for the same purposes, all of which led to the generation of specific knowledge from the variety of patterns of working identified by Coutts- Jarman, (1993), Glen, Clark and Nicol, (1995) and Schon, (1983). This kind of knowledge is often called 'experiential knowledge' (Klob, 1975) or 'personal knowledge' (Carper, 1978). It is characterized as a subjective, concrete and existential concern with the kind of knowing that promotes wholeness and integrity engagement rather than detachment; and it denies the manipulative, impersonal orientation. Personal knowledge is seen by many to be the most viable means by which to increase self understanding and nursing knowledge (Graham, 1995).

The PAR method provides the framework for developing and implementing the discharge planning protocol in this study, this framework is in agreement with the Participatory Intervention Model proposed by Nastasi, Varjas, Schensul and Silva (2000). The discharge planning protocol from this study is a research based protocol that has its primary aim to encourage sustainable change effort. This protocol is rooted in the nature of PAR and presents a mechanism for integrating discharge planning theory and practice and promoting involvement of stakeholders in practice efforts. The result of this study is mainly a discharge planning protocol, and its capacity for promoting practice acceptability, drawing on the research experience in critical care work. The protocol was concluded from group reflection and discussion and debriefing reviews with senior CCU nurses. It has the potential for bridging the gap between theory and practice, addressing practitioner diversity, fostering partnerships, promoting disciplined reflective practice, and integrating of the multiple roles of the CCU nurses.