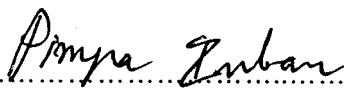


**AN INDEPENDENT STUDY TITLE : DEVELOPMENT OF DATABASE SYSTEM FOR TRAUMA  
REGISTRY, SRINAGARIND HOSPITAL, FACULTY OF MEDICINE,  
KHON KAEN UNIVERSITY**

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**ABSTRACT**

The objectives of this independent study were to design and develop the database system for trauma registry at Srinagarind Hospital, Faculty of Medicine, Khon Kaen University so as to be able to record, revise, search/inquire and print this trauma registry according to the user's needs. The study procedures included : 1) current system analysis ; 2) database design ; 3) database development ; 4) user's manual documentation ; 5) questionnaire for testing construction ; 6) system implementation and utilization ; and 7) system testing.

The database system in this study was developed by using Microsoft Access 97 program. The system was enable to perform the function as follows :

1. managing the trauma registry data including : 1) general data ; 2) accident data ; 3) traffic-prone data ; 4) hospital attendance data ; 5) diagnosis data ; and 6) treatment data.

2. searching and inquiring information on case patient through several options, the trauma registry in different ways according to these including : 1) hospital number ; 2) patient's first name ; 3) patient's family name ; and 4) class level and faculty for those patients who were KKU student.

3. printing the trauma reports in a tables or chart format as required by related agencies and persons as follows : 1) Khon Kaen Provincial Public Health Office ; 2) Khon Kaen University's Accident Prevention Committee ; 3) Khon Kaen University's Students Affairs Division ; 4) Srinagarind Hospital's administrators ; 5) operating staff, both medical doctors and nurses ; 6) students, academicians, researchers and general public ; and 7) the system supervisors.

4. providing the selection menu and pull-down menu for user's interface.

The database system was test by the computer experts, the program's operates, and the information users. The test results related that the testers agree that the developed database system was good, easy to use, and able to fulfil the objectives of database functions, including recording, editing, searching and printing the accurate information. In general, the testers satisfaction with the system were at high level. The user's manual was also practical and easy

to follow. It was, indeed, a suitable and useful program for the improvement and development of trauma treatment along with the administrators and duty officials' more effective campaign against accidents. Besides, suggestions were obtained as follows : 1) colour of form should be adjusted to suit the user, especially the regular user ; 2) there should be a security system for the database; 3) a handy user's manual should be developed and made it available for all program's users ; 4) all related personnel should have opportunity to test the program before real use ; and 5) the use of database system should be extended to other agencies dealing with trauma treatment to complete the cycle from patients' admissions to their discharges.

Suggestions from this independent study are that : Srinagarind Hospital should provide budget for the improvement and development of database system so that it can be more widely used with other groups of patients' database, both in the hospital's network system and through the internet. Further study on the development of database system in other issues should be carried out by bringing into use the computer system as an aid in each sector's work for gaining an information model compatibly with the user's needs.