

**IMPLEMENTATION OF CONTINUOUS QUALITY  
IMPROVEMENT (CQI) PROCESS  
TO MINIMIZE THE RISK ON MEDICATION ERRORS  
IN THE IMPATIENT DEPARTMENT, BANGRAK HOSPITAL**



วิทยาลัยวิทยาศาสตร์สาธารณสุข  
จุฬาลงกรณ์มหาวิทยาลัย  
COLLEGE OF PUBLIC HEALTH SCIENCES  
CHULALONGKORN UNIVERSITY

A Thesis Submitted in Partial Fulfillment of the Requirements

for the Degree of Master of Public Health

Health Systems Development Programme

College of Public Health

Chulalongkorn University

Academic Year 2001

ISBN: 974-17-0154-3

© College of Public Health, Chulalongkorn University

Bangkok, Thailand


Thesis Title : Implementation of Continuous Quality Improvement (CQI)  
Process to Minimize the Risk on Medication Errors in the  
Inpatient Department, Banprak Hospital

By : Rungphet Saengthong

Program : Master of Public Health (Health Systems Development)  
College of Public Health

Thesis Advisor : Associate Professor Sauwakon Ratawijitrasin, Ph.D.

Accepted by the College of Public Health, Chulalongkorn University,  
Bangkok Thailand in Partial Fulfillment of the Requirements for the Master's Degree

  
....., Dean of the College of Public Health  
(Samlee Plianbangchang, M.D., Dr.P.H.)

THESIS COMMITTEE



Chairman

(Ratana Somrongthong, M.A.)

วิทยาลัยวิทยาศาสตร์สาธารณสุข  
จุฬาลงกรณ์มหาวิทยาลัย

COLLEGE OF PUBLIC HEALTH SCIENCES  
CHULALONGKORN UNIVERSITY



....., Thesis Advisor  
(Associate Professor Sauwakon Ratawijitrasin, Ph.D.)



Member

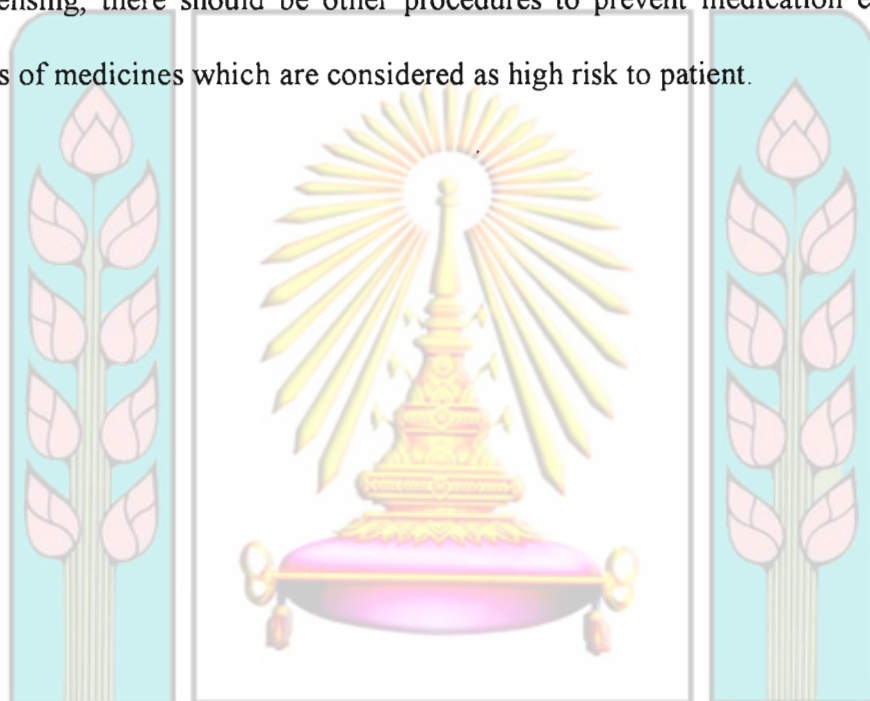
(Professor Edgar J. Love, M.D., Ph.D.)

## ABSTRACT

The aim of this research was to assess and evaluate the effectiveness of CQI that was used for reduction the risk of medication error in the Inpatient department of Banprak Hospital. The assessment was done through the process of comparison between the percentage of medication error made by IPD nurses and other related disciplines i.e. doctors & pharmacists before and after implementing CQI. During April 2001 – September 2001.

The assessment of medication error was performed based on 3 factors, namely document/equipment/medicine, the preparation of medicine and techniques of medicine dispensing. After implementing CQI, it was found that the risk to medication error caused by document/equipment/medicine, the preparation of medicine and techniques of medicine dispensing had decreased from 1.34 % to 0.55 %, 1.26% to 0.48 % and 48% to 1.45 %, respectively. It can be said that the errors due to techniques of medicine dispensing had dropped significantly as the initial value was high. Modifications and corrections were performed with in the unit only. Conclusively, the average of percentage error had dropped from 3.38% to 1.08 % and all errors ware no harm to patients. The supportive factors contributing to the success of the implementation of CQI, are that the hospital has set up a policy to achieve better quality of services and its a aims to obtain the Hospital Accreditation by 2002.

Though, the study has shown that CQI has helped the hospital to reach the goal of the reduction medication error, i.e. to reduce to less than 5 %, this result cannot guarantee that the effect of medication error to patients will decrease accordingly. Therefore, to improve the effectiveness as well as the efficiency of medicine dispensing, there should be other procedures to prevent medication error for certain types of medicines which are considered as high risk to patient.



วิทยาลัยวิทยาศาสตร์สาธารณสุข  
จุฬาลงกรณ์มหาวิทยาลัย  
COLLEGE OF PUBLIC HEALTH SCIENCES  
CHULALONGKORN UNIVERSITY