

# Service Priorities and Programmes Electronic Presentations

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# A bundle that improved quality of thromboprophylaxis in ICU

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# **Keywords:**

Thromboprophylaxis ICU checklist

#### Introduction

Thromboprophylaxis is essential in preventing deep vein thrombosis in ICU. Guideline for thromboprophylaxis in our unit was released in 2009. However, it would be a heavy burden for on–duty ICU specialists to screen every patient for proper thromboprophylaxis in our busy ICU. As a result, not all our patient received proper thromboprophyaxis. In particular, the pharmacological thromboprophylaxis was usually under-prescribed by our trainee related to its association with bleeding complications.

## **Objectives**

Increasing the awareness to thromboprophylaxis, the compliance to department guideline and the proper usage of pharmacological thromboprophylaxis in TMH ICU

## Methodology

Step 1: A standardized template for morning round was installed in TMH ICU CIS system on 1/1/2011. It includes thromboprophylaxis assessment as a mandatory item which the attending physicians must fill in during morning rounds. It allows nurses to follow it and to remind ICU physician if necessary. Step 2: A checklist that summarized the department thromboprophylaxis guideline was introduced to the Data Nurse in TMH ICU on 1/1 /2012. Data Nurse assesses ICU patients starting from day 3 of ICU admission for the compliance to the department guideline with the checklist. All questionable prescriptions are referred to designated ICU specialists for assessment. Compliance to thromboprophylaxis assessment in morning rounds and department guideline were checked before and after step 1 and step 2. Satisfactory survey for all ICU nurses was done after step 1. Data nurse was interviewed after step 2.

## Result

1/ After step 1, the compliance to thromboprophylaxis assessment was increased from 85% to 100%. 97.5% of the nurses agreed that it was useful in reminding the attending physician for ICU routines. 2/ After step 2, the usage of pharmacological thromboprophylaxis was increased from 0% to 36% and the compliance to department thromboprophylaxis guideline was increased from 80% to 100%. No patient was found to develop bleeding complications associated with pharmacological

thromboprophylaxis during the study period after step 2. 3/Data nurse was satisfied with the checklist. Not more than 2 cases each day were needed to be referred to ICU specialists for discussion. To conclude, the bundle of standardized assessment template, checklist, suitable nurse involvement and focused specialist supervisions has improved quality and guarantied safety of thromboprophylaxis in TMH ICU.