



Service Priorities and Programmes Electronic Presentations

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Use of One D Bar Code Scanner in Improving IPMOE Efficiency and Safety in Functional Units

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Introduction

The Hospital Authority Inpatient Medication Order Entry (IPMOE) toughpad system has been designed for ease of medication administration in the ward setting. When a nurse in functional units such as operating theatre, endoscopy unit or radiology department had to administer medication via IPMOE, he/she could only access the inpatient's electronic prescription by typing the patient's hospital number (HN). Upon operating theatre colleagues' suggestion and with IT support, a 1D barcode scanner was connected via USB port to the toughpad to facilitate access to patients' electronic prescription.

Objectives

Compare time taken in accessing correct inpatient electronic prescription using 1D barcode scanner with conventional method in functional units

Methodology

Nurses working in functional units were timed while accessing a specific patient's IPMOE prescription using both 1D barcode scanner and the conventional method of typing patient's HN. Paired t-test was used to assess the difference in time spent performing the tasks.

Result

Nine nurses participated in this study. Mean time $\hat{\mu} \pm SD$ taken were 28.6s $\hat{\mu} \pm 16.1s$ (95% CI:18.0s-39.1s) when manually typing the patient's HN and 5.3s $\hat{\mu} \pm 1.5s$ (95% CI: 4.4s-6.3s) when using the 1D barcode scanner. This resulted in mean time $\hat{\mu} \pm SD$ saving of 23.2s $\hat{\mu} \pm 15.7s$ using the two-sample t-test (t stat 4.13, 95% CI: 13.0s-33.5s, p