



Service Priorities and Programmes Electronic Presentations

Convention ID: 1311

Submitting author: Mr Long Yu Chan

Post title: Physiotherapist II, NDH, NTEC

Electronic Self-administered Questionnaire-Shorter Administration Time and Better Data Management

Chan LY(1), Choi CM(1), Tsang HC(1), Fong WK(1), Cheung YK(1), Chui TK(1), Lee KW(1), To YL(1), Chow KC(1)

(1) Physiotherapy department, North District Hospital

Keywords:

Electronic Questionnaire

Outcome Measure

Introduction

Self-administered questionnaires are popular ways of collecting outcome measures. They are used for evaluating patients' progress, program efficacies etc. However, it is time consuming since it involves manpower in scores calculation and data input. Its paper-based nature also poses difficulty in physical storage and risks of lost during handling. Electronic survey may be a solution to the above challenges.

Objectives

1. Compare the time required in questionnaire administration and data input for the electronic form and conventional paper-based form.
2. Analyse administrators' opinions on this electronic platform.

Methodology

A twelve-item questionnaire was distributed to each patient, either in form of electronic or paper-based. The electronic survey was administered through tablet or smartphone. To protect data privacy, patients' names were encoded by a specific string of number. The matching list of the code and patients names were saved in another file.

To assess the difference of administration time between electronic and paper-based versions, independent t-test was used, with level of significance set at $\alpha < 0.05$. Data input and administration time were also recorded. Administrators were invited to provide feedback through an anonymous questionnaire.

Result

In January 2018, twenty questionnaires were distributed to patients by five physiotherapists in North District Hospital. Time required for administering electronic and paper-based questionnaire were 161 seconds and 226 seconds respectively. Marginal statistical significance was obtained ($p=0.057$). The average time required for data input and administration of the electronic and paper-based questionnaire was 18 seconds and 47 seconds respectively. All physiotherapists who participated agreed that the electronic questionnaire was more convenient and would reduce the administration time compared to conventional paper-based questionnaire. 80% of

the physiotherapists preferred the electronic questionnaire to the conventional paper-based form questionnaire since it is easier to handle. Utilisation of electronic questionnaire reduces time required for administration, data input and data management. It is considered to be more user-friendly and better data management. Since self-administered questionnaire utilisation has been frequently conducted in clinical conditions, health care workers should consider adopting the electronic questionnaire for the aforementioned benefits.