

Service Priorities and Programmes Electronic Presentations

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Mobile App: Breathing Right, Breathing Light (活出好氣式) for Patients with

Respiratory Disease

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Mobile App Respiratory Rate Breathing Re-training Coordinated Breathing Technique COPD Ax Test (CAT) COPD Ax Test (CAT)

Introduction

As Occupational Therapists, we encourage people to learn through meaningful activities. Usage of mobile apps has become increasingly prevalent and the making of this app is to create a new platform of rehabilitation service in the respiratory field. The app includes various dimensions of breathing retraining, such as education and games in breathing, applications of coordinated breathing techniques in daily activities, Health Qigong as well as resources and references. Besides, use of the COPD Ax Test (CAT) in a self-reported format will also be included.

Objectives

It aims to reinforce persons having shortness of breath resulted from diseases (e.g. COPD, cancer, cardiac conditions, etc.) in proper management of their daily activities. We will educate patients coordinated breathing technique in management of shortness of breath in ADL. However, most of them have shown fair in the application especially after discharge from hospital. We hope that through this app, some trainings can be carried on outside of the hospital. In addition, regular practices with a self-management approach is crucial in the hope of reducing chance of unplanned readmission e.g. for those COPD patients. Application of coordinated breathing in Health Qigong is also reinforced as a kind of home program. Learning through the media of games as a kind of experiential learning may be more interested and in return, enhance application of coping skills learned. In addition, COPD Assessment Test (CAT) scores will also be used to relect on own conditions apart from the various performance in the games. This will certainly enhance in the process of medical F/U.

Methodology

A small group of 5 Occupational Therapists have gathered and designed the initial framework of the app. It was then forward to the OTCOC (Respiratory) Task

Group for comment and review. We have also seek consensus of it's development with two Respiratory Consultants and one A.C. in NTWC. We have seek endorsements with the NTWC IT/IS committee meeting on 2-10-2014, the Mobile Devices and Applications (Clinical System) Task Force meeting on 12-12-2014, and the meeting of Mobile App (Public & Staff Engagement) Task Force on 13-1-2015.

Result

Since the app is still in the fabrication process, various aspects are still in refining process for both Android and IOS platforms. We will put it in clinical trial once the app has completed. Outcomes like the duration in utilization of the app, accuracy of coordinated breathing technique used in each games, CAT scores will be saved in the app. These can be collected and evaluated later on e.g. during F/U. As a result, the outcome may greatly enhance the clinical service in the respiratory field. The app will shared and used by all Occupational Therapists in HA in management of patients having respiratory problems. And hope that outcome can be grouped together for further analysis later on.