MULTI-TIERED ELECTROCARDIOGRAM NETWORK SYSTEM: APPLICATION IN A REGIONAL MEDICAL ASSOCIATION IN PR CHINA

Zhi-Hua Gong¹, Ming-Ming Zhang², Yao Qu³ and Qing Xia³

¹Department of Cardiac Function, ²Department of Information, ³Department of Cardiac Ultrasound, Qingdao Central Hospital, Qingdao, PR China

Abstract. People's Republic of China has made good progress in its medical reform but challenges remain. A multi-tiered electrocardiogram (ECG) network system was developed to solve problems of traditional ECG monitoring, comprising a hospital ECG, information and electronic medical record systems, a web-based ECG network system of the regional medical association and 120 pre-hospital first-aid ECG systems linked by a4G mobile network. Initial implementation of the ECG network system demonstrated efficiency and practicability under current medical environment. This network should be of significant benefit for management and remote consultation of heart disease and provides a reference for exploring reforms in clinical data sharing and improvement in efficiency of medical resource integration.

Keywords: PR China, electrocardiogram, heart disease, medical resource sharing, regional medical association

Correspondence: Qing Xia, Department of Cardiac Ultrasound, Qingdao Central Hospital, No. 127 Siliunan Road, Shibei District, Qingdao 266042, People's Republic of China.

Tel: +86 18669710089

E-mail: ayue112266@163.com