Service Priorities and Programmes

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Submitting author: Mr Kwok Leung AU
Post title: Advanced Practice Nurse, Grantham Hospital, HKWC

Four Years Experience in Remote Follow-up Monitoring of Cardiac Implantable Electrical Devices (CIEDs) in Hong Kong

Au KL(1), Tsui KC(1), Ng TC(1), Chung YS(1), Lam LY(1), Lai KW(1), Cheung MY(1), Ko YK(1), Fan K(1)
(1)Cardiac Medical Unit, Grantham Hospital

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Introduction

Through the implementation of remote monitoring (RM) and follow-up from the patient's home environment of the CIED, the Grantham Hospital has achieved to decrease the numbers of clinic visits, allow the earlier detection of actionable events and reduce the health-care resource utilization for patients.

Objectives

In this article, the author would like to provide a good experience sharing with the other hospitals, which are preparing to provide similar services in Hong Kong.

Methodology

Documentations: Before launching the program, we have to ensure that the proper listing of RM devices is under the Medical Device Administrative Control System with the Department of Health, HKSAR. Other documents should include Certificate of Conformity under the category of Medical Implant Communication System. Written approval from the manufacturer in providing a secure data transport system is a mandatory provision in this program. The consent forms (English and Chinese Verions) were drawn up specifically for the hospital and patients as well as the manufacturer. Workflow: Patients with RM-capable CIEDs were recruited in our program. All participants would receive thorough educations and follow the device manufacture guideline to perform transmission. Remote transmissions were arranged in accordance with the ACC/AHA/HRS guidelines. The RM nurse specialists are responsible for reviewing all received remote transmission data, commenting on the transmission and rescheduling appointments, filling recorded data, consult

cardiologist for reviewing the abnormal findings, conducting telephone follow-up and calling patients who miss their schedule transmissions to prevent missed follow-up.

Result

There are total 97 patients (mean age 58±15 years/men 58%) participated in this study. Total 2273 transmissions have been recorded, of which 1047(46%) are scheduled remote transmissions with less <1% requires further workup from the RM specialist. For the remaining 1226(54%) of unscheduled remote transmissions, approximately 10% transmission requires follow-up actions. These include professional advice, hospitalization, advancing follow-up appointment, medication adjustment, device reprogramming and further investigations. The frequency of in-clinic visit is reduced from 4 times a year to 2 times a year. The overall waiting time during follow-up consultations has been reduced by 25% in comparison with the conventional in-clinic visit. Patient's overall satisfaction rate about remote monitoring project was 93%. The four-year experience in Remote follow-up Monitoring of CIED in Grantham Hospital has achieved with a desired outcome. With the advancement of telecommunication technology, the frequency of in-clinic visit can be significantly reduced. We expect the provision of the remote monitoring services will continue to expand in the future.