SUSTAINABILITY OF CARDIOLOGY SERVICES: ECONOMIC EVALUATION AND COMMUNICATION IN REMOTE MONITORING OF PEOPLE WITH PACEMAKERS

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BACKGROUND

The use of remote monitoring (RM) of pacemakers is limited, and very few studies have focused on their comparative cost-effectiveness.

OBJECTIVES

Evaluate the effectiveness and costs of RM of people with pacemakers in comparison to the monitoring performed in hospital (HM) in relation to the sustainability of cardiology services.

METHODS

Controlled, non-randomized, non-blinded clinical trial, with data collection carried out during the pre-implant stage and after 12 months. B3 users of pacemakers were assigned to either a TM group (n=30) or HM (n=53) group.

Effectiveness: baseline characteristics and number of in-hospital visits, as well as feasibility, reliability, and safety were analyzed. The questionnaires administered were EuroQol-5D (EQ5D) to evaluate the health-related quality of life and Duke Activity Status Index (DASI) to assess the functional capacity.

The costs were estimated from the NHS and patient’s perspective.

To evaluate the workload, time and costs of informal care a controlled, non-randomized clinical trial was conducted, with data collected 12-months after implantation and from informal care perspective. The Survey on Disabilities, Personal Autonomy, and Dependency Situations was used to obtain information on demographic and social characteristics, levels and professional aspects, time and type of care, difficulties in providing care, health status, economic and family or leisure impact due to informal caregiving for patients with pacemakers.

RESULTS

Four scientific articles related to the Project were published in International Scientific Journals included in Journal Citation Report (JCR):


One oral and two Poster communications were presented in the Nordic Conference of Implementation of Evidence Based Practice (February 2015, Bergen):


Two oral communications were presented to the Ist International Arctic Circle Conference on Healthcare Technology Assessment (June 2015, Bodo, Norway):


One oral and two Poster communications were presented in the 12th Health Technology Assessment International (HTAI) Congress (June 2015, Oslo):

1. López-Villegas A, Catalán-Matamoros D. Comparative effectiveness of remote monitoring of pacemaker versus conventional modality: quality of life at the 6 months of follow-up.

Two Poster communications were presented in the European Union Geriatric Medicine Society – 11th EUGMS Congress (September 2015, Oslo):


Four oral communications were presented and defended in the II International Conference in Health Communication (October 2015, Madrid-Spain):

1. Remedios López-Liria. Home versus hospital health care services, are the effective?

Three oral communications were presented in 1ª International Conference on Telemedicine and Healthcare Sustainability (November 2015, Almería-Spain):

1. Remedios López Liria. Telemedicine applied to the systems of register and information in home-care.

CONCLUSIONS

RM of pacemaker users is configured as an equal option to the traditional hospital follow-up in terms of health-related quality of life, functional capacity, reliability and safety. RM promotes early detection of adverse events and in addition, the number of in-hospital visits is significantly reduced. It is a more efficient alternative involving a significant cost savings for patients and their relatives.

From the informal care perspective, the study confirms that caregivers in both groups show similar baseline characteristics, workload and time spent. Moreover, the costs due to the patient care in the telemonitoring group are significantly lower than those presented by the conventional monitoring group in hospital.

More activities has been planned to be developed by the working groups created earlier with the objective of sharing the results obtained within the project and its part in the telemonitoring of cardiac implantable electronic devices.

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