PP002 Sudden Cardiac Arrest: Wearable Cardioverter-Defibrillator Therapy

AUTHORS:

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INTRODUCTION:

Sudden cardiac arrest (SCA) is the most common cause of death in patients with coronary artery disease. Mostly, ventricular tachycardia (VT) and ventricular fibrillation (VF) are the underlying aetiology of SCA, which is claimed to be successfully treated by a novel therapy, a wearable cardioverter defibrillator (WCD, LifeVest®).

The assessment, performed within the European Network for HTA (EUnetHTA), aimed to provide valid data on clinical effectiveness and safety of the WCD. Furthermore, the project intended to elicit patients views on aspects regarding their cardiac disease and the WCD therapy as well as to identify neglected outcomes.

METHODS:

A synthesis of evidence on the basis of a systematic literature search in Medline via Ovid, Embase, the Cochrane Library, and the Centre for Reviews and Dissemination (CRD) databases was performed. The search was complemented by citation tracking and handsearch.

A face-to-face semi-structured focus group interview was performed with five cardiac disease patients in the scoping phase.

RESULTS:

Since no prospective controlled trials were found, no assessment of effectiveness could be performed. With regard to safety, five prospective studies were included, but the quality of the body of evidence was very low. Adverse events (AEs) reported were skin rash/itching (6 percent), false alarms (14 percent), palpitations/lightheadedness/fainting (9 percent) and discontinuation due to comfort/lifestyle issues (16-22 percent). Serious adverse events (SAEs) were inappropriate shocks (0-2 percent) and unsuccessful shocks (0-.7 percent). Frequency of SAEs leading to death was 0-.3 percent.

Patients of the focus group reported that experiencing a sense of security was crucial to them. The WCD therapy was not considered an option for weeks or months, due to expected restrictions in living a 'normal' and secure life.

CONCLUSIONS:

No statement can be made about the device effectiveness – further research is needed. More data and more adequate reporting of AEs and SAEs are needed in order to establish the device safety. In particular, more data is needed for risk stratification of high risk patients in order to further narrow down the wide range of indications for the WCD use.

PP006 Ebola In The Netherlands: Costs Of Preparedness And Response

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INTRODUCTION:

Between December 2013 and April 2016, an unprecedented epidemic of Ebola Virus Disease (EVD) took place. This epidemic urged countries all over the world to be prepared for the possibility of having an EVD patient (1). Besides morbidity and mortality of the disease, containment efforts also have economic consequences for society. In this study, costs of preparedness for and response to EVD made by the Dutch health system were estimated.

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METHODS:

We used an activity-based costing method in which cost of personnel time targeted at preparedness, and response activities was based on a time recording system and interviews with key professionals of the organizations involved. In addition, patient days of hospitalizations, laboratory tests, personal protective equipment (PPE), as well as costs for additional cleaning and disinfection were acquired via the organizations. All costs are expressed at the 2015-euro price level.

RESULTS:

The estimated total costs of EVD preparedness and response in the Netherlands were averaged at EUR14.1 million, ranging from EUR7.6 to EUR24.9 million. There were thirteen possible cases clinically evaluated and one confirmed case, admitted through an international evacuation request, corresponding to approximately EUR1 million per case (2). Preparedness activities of personnel, especially of all ambulance care services and hospitals that could possibly receive a case, and expenditures on PPE, were the main cost drivers.

CONCLUSIONS:

The estimated total cost of EVD preparedness and response in the Netherlands was substantial. Costs made by healthcare organizations were higher than among public health organizations (3). Designating one ambulance care service and fewer hospitals for the assessment of possible patients with viral hemorrhagic fever or other highly infectious disease of high consequence might improve efficiency and reduce future costs. The experiences and collaboration of healthcare organizations that managed patients with possible EVD can serve as a valuable resource for future outbreaks of other highly infectious diseases.

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PP007 Technology Adoption In Hospitals - Balancing Incentives - A Survey

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INTRODUCTION:

Health Technology Assessment (HTA) in the hospital framework involves evaluating safety and cost-effective benefits alongside additional perspectives. We must take into account: professional skills, patient mix, infrastructure costs, the competitive arena and promoting innovation as part of the hospital strategy. Within budgetary constraints, hospitals need to focus on clinical excellence, prioritizing selected technologies in key fields.

METHODS:

A survey was conducted among thirty-five mid-level managers; department directors and head nurses from eight medical centers. The data was collected from a structured questionnaire scoping five fields: clinical efficiency, risk, benefit, contribution of relevant "players" for decision making and impact of adoption.

RESULTS:

Personal characteristics of the responders correlated with certain trends: managers with longer seniority ranked life-saving higher than younger managers, as did men in comparison to women. Participants from the peripheral regions ranked improvement in quality of life

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