Health economics and the European Heart Rhythm Association

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The management of healthcare is becoming extremely complex in developed countries, as a result of increasing age of the population and increasing costs of care, coupled with diminishing resources due to global financial crisis. This situation threatens access to appropriate care, and a more or less explicit rationing of some types of treatment may occur in ‘real world’ clinical practice. This is particularly true for those treatments or interventions with a relatively high up-front cost, such as cardioverter defibrillators, devices for cardiac resynchronization therapy or ablation procedures for atrial fibrillation. The European Heart Rhythm Association (EHRA) is strongly convinced that the skills of electrophysiologists and cardiologists responsible for the management of rhythm disorders have to evolve, also embracing the knowledge of health economics, clinical epidemiology, health-care management and outcome research. These disciplines do not belong to what is considered as the conventional cultural background of physicians, but knowledge of comparative cost effectiveness and of other economic approaches nowadays appears fundamental for a dialogue with a series of stakeholders, such as policy makers, politicians, and administrators, involved in budgeting the activity of hospitals and health-care services, as well as in approaching health technology assessment.

**Keywords**  
Cardiac implantable electrical devices • Economic evaluation • Health technology assessment • Outcome research • Policy making

The field of arrhythmia management and device therapies has faced an impressive growth in the last decade, with development and validation, through randomized clinical trials, of a series of innovative treatments, such as cardiac defibrillators (ICDs), devices for cardiac resynchronization therapy (CRT), and catheter ablation procedures for atrial fibrillation and ventricular tachycardias. In parallel, increased awareness has developed regarding the burden that heart rhythm disorders generate on clinicians and health-care providers, with important financial implications for health-care systems. Nowadays, the management of healthcare is becoming extremely complex in developed countries, as a result of increasing age of the population and increasing costs of care, coupled with diminishing resources due to global financial crisis. This situation threatens access to appropriate care, and a more or less explicit rationing of some types of treatment may occur in ‘real world’ clinical practice. This is particularly true for those treatments or interventions with a relatively high up-front cost, such as ICDs or CRT devices or AF ablation procedures.1

In this setting, the access to care is also threatened by the wrong perceptions that any treatment with a high up-front cost may not be good value for money, a perception that can be appropriately criticized on the basis of several economic data.1 In order to fight against these wrong perceptions, appropriate economic approaches are available for weighting costs against benefits and outcomes, in order to provide an appropriate basis for decision making and, in a broader perspective, for resource allocation. These issues are particularly topical and of utmost importance in the European context, where great variations exist across Europe in organization of Health Care Services, funding of care, and availability of centres specialized in electrophysiology, as extensively analysed in the **EHRA White Book**.2

Within this complex scenario, where the burden of a series of diseases is huge (atrial fibrillation, heart failure, sudden arrhythmic death, etc.) but access to evidence-based treatments is threatened by both misconceptions and limited resources, electrophysiologists and clinical cardiologists involved in patient care should invest time in appraising the basic concepts of health economics and outcome research. These disciplines do not belong to what is considered as the conventional cultural background of physicians, but knowledge of comparative cost effectiveness and of other economic approaches nowadays appears fundamental for a dialogue with a series of stakeholders, such as policy makers, politicians, and administrators, involved in budgeting the activity of hospitals and health-care services, as well as in approaching Health Technology Assessment.

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evolve, also embracing the knowledge of health economics, clinical epidemiology, and health-care management. The current presidency of EHRA has therefore decided to invest resources in this field, and, first among all the Associations of the European Society of Cardiology, in 2009 instituted a Committee on Health Economics and Outcome Research, involving both physicians and health economists. The aim of this Committee is to promote initiatives on both scientific research and education, involving clinicians, scientists, patients’ associations, representatives of the industry, and institutions responsible for health-care organization.1

This special issue of EP-Europace is the result of an initiative of the Committee on Health Economics and Outcome Research of EHRA. This issue covers a wide spectrum of topics, starting from an overview of economic evaluations, and then focusing on the disease burden and emerging costs of atrial fibrillation and heart failure, two growing epidemics in western countries. The emerging role of European registries, a cornerstone of outcome research and policy making is also highlighted, as well as the important contribution of patient associations in promoting and supporting the access to evidence-based therapies. The applications of economic evaluations to a series of treatments that carry a high up-front cost, such as cardioverter defibrillators, devices for CRT, and atrial fibrillation ablation procedures are discussed in articles co-authored by both electrophysiologists and health economists. Remote monitoring, a new option for improving both patient care and the organization of device clinics, is also discussed. Finally, the application of health economics in policy making, the need for an appropriate approach to treatment with medical devices, taking into consideration the differences with pharmacological treatments, and the possibility to base decision making on a multidisciplinary approach, such as health technology assessment, are debated. In this complex scenario, the heterogeneity of reimbursement practices and the need for a refinement of DRG (diagnosis-related groups) systems and for new strategies to sustain and enhance those effective technological innovations that may be beneficial for specific patient populations are also highlighted.

We hope that, despite the current financial situation, the commitment of EHRA, open to collaboration with all the ‘stakeholders’ involved in the complex processes of health-care funding, health-care organization and health-care delivery, will succeed in the common goal of providing every patient with the right treatment, at the appropriate time, and in the right setting, provided that this treatment or intervention has a reasonable and affordable cost for the community or is ethically essential.

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References