Impact of value communication in decision making: an approach to the treatment of type 2 diabetes in Portugal

D. Viriato, M. Antunes

1Novartis Farma-Produtos Farmacêuticos S.A., Portugal; 2Universidade de Lisboa, Faculdade de Ciências. Departamento de Estatística e Investigação Operacional e Centro de Estatística e Aplicações de UE.

Introduction

The increasing budgetary constraints faced by healthcare players have made the access decision increasingly complex, and decentralized processes a growing trend. Thus, demonstration of the added value of new health technologies has become critical to ensure patients’ access to innovation [1,2].

Objectives

The main goal of this study was to identify the most important value messages within the decision making process in the treatment of Type 2 Diabetes Mellitus (T2DM) among Geneva Practitioners (GP) from Primary Care Centers. This study also assessed GP knowledge about Health Economic concepts.

Methods

During 2013, GP from Portuguese Primary Care Centers (Figure 1) were invited to participate in regional meetings based on Health Economics training [3]. This training was divided into three sessions: 1) principles of economic evaluation; 2) presentation of a case-study – cost-effectiveness analysis of vildagliptin vs sulphonylureas (SU) and; 3) presentation of a value communication tool, developed in BaseCase [4] platform, that enables the estimation of meaningful impacts of T2DM in Portugal.

To characterize the learning insights and identify the factors considered in the decision making process, the authors applied a pre-post survey. This survey was developed and validated by a panel of experts consisting of a Physician, an Epidemiologist, an Health Economist and a Statistician. Survey Nr.1 was applied at the beginning of training session, and Survey Nr.2 was applied at the end of the training.

Data analysis (descriptive statistics and hypothesis testing) was performed using R Statistical Software [5].

Results

The analysis was based on a sample of 85 GP from North (41.5%), Center (17.0%) and Lisbon & Tagus Valley (41.5%) Portuguese Regional Health Administrations (ARS), with the majority of participants (61.2%) belonging to USF units (Figure 2).

Wilcoxon test was used to assess the impact of training on participants’ learning. Results demonstrated that the difference in the number of correct answers between pre and post surveys was statistically significant (p<0.001). Figures 3 and 4 show an increased number of correct answers in Survey Nr.2 compared with Survey Nr. 1.

Conclusion

This analysis demonstrated that both clinical and economic factors are important at local decision process.

From a clinical perspective, patients’ QoL is the most relevant endpoint, while macro / microvascular complications and hypoglycemia are the key decision factors on the economic burden.

The majority of the GP prefer vildagliptin to control T2DM, instead of SU, in patients not controlled with metformin, considering the fewer hypoglycemic episodes and QoL improvements its greatest benefits.


Acknowledgments: M. Antunes’ research is partially supported by National Funds through ICT — Fundação para a Ciência e a Tecnologia, project PTDC/MTM–11/080208/2010 and FEDER/POCI/140068/2011.