Endocrinología, Diabetes y Nutrición

P-013 - Care delivery processes for Diabetes Mellitus patients suffering from ophthalmological complications, and their impact on costs

I. Bosch Frigola[a], M. Carles-Lavila[b], F. Coca-Villalba[a] and M. Pérez-Lacasta[b]

[a]Universidad San Jorge. [b]Universitat Rovira i Virgili.

Resumen

Introduction: Diabetes mellitus (DM) is classified as a Non-Communicable Disease (NCD) in which prevention or delaying the onset of complications is essential. Some of the visual complications that may affect patients suffering from DM are diabetic cataract, diabetic retinopathy and diabetic macular edema. Should patient require medical care for any of these health problems, they will require certain hospital services based on the severity of the complications. Depending on the services required, hospital costs may increase significantly.

Objectives: To analyse the evolution of the cost of health care processes for patients with DM for all age groups diagnosed with ophthalmological problems linked to complications arising from this NCD, considering the following hospitalisation requirements: care processes, admission and discharge conditions, patient provenance, and patient needs during the hospital stay from 2012 to 2018, before the COVID-19 pandemic.

Material and methods: This study focused on the number of cases of patients with DM assisted at "Red de Hospitales del Sistema Nacional de Salud" according to the database provided by Grupo RECH – Red Española de Costes Hospitalarios. The variables analysed were those included in the primary diagnoses related to DM. Patients were not differentiated by age range. In reference to the hospitals analysed, the types of care considered included hospitalisation at home, hospitalisation, major outpatient surgery, and emergencies. Patient discharge conditions included home, transfer to another acute hospital, and death, among others. Types of hospital admission included emergencies, scheduled, or unknown. Similarly, the provenance of patients to be cared for included the transfer from another hospital. R software was used to process the variables and generate outputs. The Correspondence Analysis methodology (CA) facilitated an analysis of all cases by grouping the variables relevant to the study and tracking their evolution over time.

Results: This methodology enables the monitoring of changes in the evolution of the percentages of total costs related to the patients' main diagnoses. Of the diagnoses analysed, increases are noted in 2013 for `ward costs' and `medical services', in 2015 for `ICU-related percentage costs' and in 2018 for `surgical block'.

Conclusions: CA is beneficial for understanding groupings among hospitalisation patterns, the severity of hospitalisations, and the patient profile in the sample analysed. This methodology makes it possible to link patients' diagnoses to the surrounding hospital system and to observe regular progression in the weight of healthcare services related to ophthalmological complications.