

Design and implementation of a comprehensive system of clinical follow-up and glucose monitoring in children affected of type 1 diabetes, in Andalusia (Spain).

Hernández-Soto R¹, Martínez-Broca MA², Mayoral Sánchez E², Alcaide-Gantes AA¹, Luque-Romero LG¹
1) Primary Care District Aljarafe-Sevilla Norte, Sevilla, Spain. 2) Diabetes Plan of the Andalusian Public Health System, Sevilla, Spain

Introduction

The incorporation of the interstitial glucose monitoring system, in the offer of Health Care Services in the Andalusian Public Health System (APHS), means an opportunity for the implementation of a model of integration, and follow-up of glucose data, and the evaluation of their impact in health results.

Objective

Design and implementation of a model that allows the identification, registration of clinical data, integration of interstitial glucose data and assessment of the results in health, in the pediatric population affected by type 1 diabetes (DM1), and user of flash monitoring systems in the APHS.

Methods

The target population (DM1 from 4 to 18 y.o.) was estimated in 3000 patients. Thirty three hospitals, 50 endocrinology hospital services, and 350 sanitary professionals participated. The process of appointment, structured formation and activation of the patients, started in May 2018, in a standard procedure in the hospital services, included in the study. The comprehensive system of monitorization was designed in four steps:

1) Authorization: the application form of clinical data and indication for the monitoring system; 2) Registration: unequivocal identification in two registration platforms (the APHS corporative and Free View); 3) Follow-up: extraction and loading of aggregated glucose data; 4) Evaluation: analysis of clinical data information.

Processing and discharging of the data from glucometric analysis from MFG system, in the digital clinical history of the children, is set up each three months.

Results



Conclusions

An integrated system of clinical follow-up in diabetic pediatric patients and users of the MFG system, has been set up successfully, in the Andalusian Public Health System. This allows the definition of cohorts, for the study of health results, that include the integration of glucose data in the digital clinical history. It brings an opportunity for a technological organized innovation. Improving the management for the future of this kind of patient in adulthood.