

An Innovative Data collection System for Improving Outcomes in Patients Treated with Diabetes Technology

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1. OBJECTIVE

Medtronic Diabetes provides a comprehensive portfolio of innovative technologies for people living with diabetes, setting the highest standards of innovation with Advanced Hybrid Closed-Loop systems.

To meet the clinical need of having a tool to support health care providers' (HCPs) capability to collect real-world data, the authors developed the Galaxy project, joining the Medtronic One Hospital ClinicalService (OHCS) program.

3. RESULTS

All collected data are analyzed periodically and updated on the data collection system in the form of reports. The data collection system also gives the possibility to carry out ad hoc analyses.

Topics like glycemia variation during Ramadan, time in range in pregnancy and the use of technology in ageing patients can be evaluated.

With consent from the clinics, data from reports can also be shared and aggregated across clinics to foster research and collaboration. By combining data from multiple sources, analyses will have the statistical power to draw timely and valuable scientific insights, which convert data into real-world evidence

4. CONCLUSIONS

Galaxy represents an innovative solution and service to easily collect Medtronic users' real-world data to support HCPs in identifying trends and insights for patient management while aggregating data from different sources to obtain a holistic patient overview and to foster scientific collaboration.

2. METHODS

The data collection system of Galaxy efficiently collects clinical, device and patient reported outcomes data. Clinical data is collected in ad-hoc electronic case report forms (e-CRFs), accessible via a web-based system. The system is designed to allow the collection of device, medical history, laboratory, pharmacological therapies, and clinical events data. Device data comes directly from the CareLink™ System and patient reported outcomes data from a dedicated patient app in which four validated questionnaires are included: Clark, Gold, DTSQ and the VAS scale.

Figures. Draft weekly report

