# Smart Telemedicine Support for Continuous Glucose Monitoring: The Embryo of a Future Global Agent for Diabetes Care

Mercedes Rigla, M.D., Ph.D.

## Abstract

Although current systems for continuous glucose monitoring (CGM) are the result of progressive technological improvement, and although a beneficial effect on glucose control has been demonstrated, few patients are using them. Something similar has happened to telemedicine (TM); in spite of the long-term experience, which began in the early 1980s, no TM system has been widely adopted, and presential visits are still almost the only way diabetologists and patients communicate. The hypothesis developed in this article is that neither CGM nor TM will ever be routinely implemented separately, and their consideration as essential elements for standard diabetes care will one day come from their integration as parts of a telemedical monitoring platform. This platform, which should include artificial intelligence for giving decision support to patients and physicians, will represent the core of a more complex global agent for diabetes care, which will provide control algorithms and risk analysis among other essential functions.

*J Diabetes Sci Technol 2011;5(1):63-67*

**Author Affiliation:** Endocrinology Department, Hospital de Sabadell, Barcelona, Spain

**Abbreviations:** (CGM) continuous glucose monitoring, (EHR) electronic health record, (RT-CGM) real-time continuous glucose monitoring, (TM) telemedicine

**Keywords:** artificial intelligence, continuous glucose monitoring, decision support, telemedicine

**Corresponding Author:** Mercedes Rigla, M.D., Ph.D., Endocrinology Department, Hospital de Sabadell, Parc Tauli s/n 08208, Sabadell, Barcelona, Spain; email address *MRigla@tauli.cat*