

## **DEVELOPMENT OF AN ELECTRONIC DIABETES REGISTER WITH A MOBILE PATIENT INTERFACE**

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### **ABSTRACT**

The Electronic Diabetes Register (EDR) is a Diabetes Electronic Medical Records system that consists of two integrated modules for healthcare physicians and patients. It enhances quality, safe and efficient care of patient by the hospital. It compiles, collects, and stores patient information for easy, secure access and frequently requested outcomes reporting. Diabetic patients are quite sensitive and need to be closely monitored and this justifies the need for this system.

The objective of this study is to develop a patient-centric electronic diabetes register that can function both at the hospital and on the patient's mobile device. It also examines the importance of the EDR to both the healthcare facility and diabetic patients here in Nigeria. The EDR is a web application with client server architecture. The server is located on the hospital system while the client is a mobile application that runs on the patient's mobile device. The application was developed using Java programming language on the NetBeans IDE and MySQL on WAMP server.

The application allows healthcare professionals to input, edit and update patient's data. It also allows the patients to have access to information via their mobile device. Other functionalities embedded in the system are generating and viewing reports. The project concluded that it is more effective and safer for diabetic patients if the EDR is used by hospitals nationwide.