

## Secured Cancer Care and Cloud Services in Internet of Things /Wireless Sensor Network Based Medical Systems

**Authors :** Adeniyi Onasanya, Maher Elshakankiri

**Abstract :** In recent years, the Internet of Things (IoT) has constituted a driving force of modern technological advancement, and it has become increasingly common as its impacts are seen in a variety of application domains, including healthcare. IoT is characterized by the interconnectivity of smart sensors, objects, devices, data, and applications. With the unprecedented use of IoT in industrial, commercial and domestic, it becomes very imperative to harness the benefits and functionalities associated with the IoT technology in (re)assessing the provision and positioning of healthcare to ensure efficient and improved healthcare delivery. In this research, we are focusing on two important services in healthcare systems, which are cancer care services and business analytics/cloud services. These services incorporate the implementation of an IoT that provides solution and framework for analyzing health data gathered from IoT through various sensor networks and other smart devices in order to improve healthcare delivery and to help health care providers in their decision-making process for enhanced and efficient cancer treatment. In addition, we discuss the wireless sensor network (WSN), WSN routing and data transmission in the healthcare environment. Finally, some operational challenges and security issues with IoT-based healthcare system are discussed.

**Keywords :** IoT, smart health care system, business analytics, (wireless) sensor network, cancer care services, cloud services

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