NETWORK-BASED MEDICAL APPARATUS CONTROL AND DATA MANAGEMENT SYSTEMS

ABSTRACT

Provided are new methods for controlling the operation of medical devices and related systems. Devices collect and relay sensor data via a secure internet connection in a streaming manner, but can also collect such data locally as cache data. When certain events occur, the devices also relay collected cache data. Device data is received by a network data system that analyzes the data and controls operation of the devices and other network devices based on such analysis. The medical devices can comprise multiple zones performing different data collection functions and being subject to different data relay processes. The system can segregate protected health information from commercial users that are allowed to access certain analytical data. In aspects, the system interacts with third party databases, e.g., customer relationship management systems, in generating analytical data. In aspects, machine learning processes are employed to improve the operation of such systems.

FIG. 24