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|  | | SMART DRIP MANAGEMENT SYSTEM | | | | |  | |
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|  | | | | 2/21/23—GROUP PROJECT PROPOSAL—PROF. ZIVAN EZHIL |  | | | |
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|  | THE PROBLEM | | | | | | |  |
|  |  |  | In the modern world, hospitals have more than 120 rooms, and we have a well-developed healthcare system with significant infrastructure. If there are patients in every room in such a large hospital, it is a problem. To remember every drip or IV the patient receives is challenging for nurses.  Running throughout the hospital to give the patient quality care on time is challenging for the nurses to manage. Moreover, it can be challenging for the patient to wait for the nurse's attention given the possibility that she is preoccupied with other tasks.  That does make drip administration a difficulty for all hospitals, even though we have ample manpower on hand with certified training and knowledge.  It might take a lot of time and requires frequent monitoring to manually manage drips. Nurses must often monitor the drip rate and modify it as necessary, which might be difficult if they are caring for several patients or have other duties to complete.  This may result in missed or delayed drug delivery, which could have an adverse impact on the patient's health. | | |  |  |  |
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|  | | THE SOLUTION | | |  | |
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|  | SMART DRIP MANAGEMENT SYSTEM FOR HOSPITALS The goal of the smart drip management system for hospitals is to assist medical staff in effectively administering intravenous drugs and fluids to patients while decreasing the chance of mistakes and improving patient safety. The system tracks usage, sends alarms for possible problems, and employs cutting-edge technology to monitor and control the flow of IV fluids and drugs.  The following are some of the vital parts of the smart drip management system:  The flow of IV fluids and drugs is continuously monitored and controlled by smart infusion pumps, which are outfitted with sophisticated sensors, lasers, AI and algorithms. System will not only learn but protect patients from injury, they may also spot possible mistakes like air bubbles and warn medical staff to them.  With the use of our Smart Management software, we can:   * Integration with the hospital's electronic health record (EHR) system: The system is compatible with the hospital's EHR, which gives medical personnel access to patient data, medication orders, and dosage instructions in real time. * Barcode Scanning: To make sure that the right drug and dosage are being given to the right patient, the system employs barcode scanning technology. The inventory and use of IV drugs may both be tracked using the barcode scanner. * Analytics and reporting: The system gathers information on the administration, dose, and any mistakes of medications. This information may be utilized to spot trends and enhance patient safety. To offer information on medicine consumption, compliance, and inventory management, reports can be prepared. * Mobile notifications: If there are any problems with the administration of medication, such as a potential overdose or an empty prescription bag, the system may send warnings to the mobile devices of healthcare providers.   Overall, the smart drip management system for hospitals equips medical staff with the instruments they need to precisely and securely provide IV drugs and fluids to patients. The system serves to lower the possibility of patient injury and improve overall patient safety by utilizing cutting-edge technology to monitor and control the flow of pharmaceuticals, as well as track consumption and offer alerts for any problems. | | | | |  |