HOSPITAL MANAGEMENT SYSTEM

ORGANIZATION

The University Hospital of Pediatric Excellence (UHOPE) is the main hospital in the city of Medz and is affiliated with the Medz University. Since the foundation of the university in 1612, an academic hospital has existed in various forms. Today, UHOPE Medz comprises an academic hospital, the faculty of Medicine, and the children's hospital. With approximately 7,600 employees, UHOPE is one of the biggest employers in the region. Patient safety is UHOPES number one priority. To keep track of its day-to-day activities and patient records, the hospital uses more than 32 different management systems that were implemented independently during the last decades, confronting the hospital with various challenges. In addition, rising costs and mounting privacy issues add to these challenges. In order to ensure the highest level of patient safety and to keep up with the ever-evolving digitalization of healthcare, the hospital administration decided to invest in a new hospital management system. The company you are working for has been contracted to implement a new hospital management system to integrate a majority of the components currently provided by over 32 different systems.

AS-IS SITUATION

UHOPE consists of many different departments, including Emergency, Pediatrics, Anesthetics, Laboratory, Neurology, Pathology, Human Resources, etc. Furthermore, a variety of stakeholders are to be considered in a hospital. Next to the doctors there are nurses, receptionists, administration employees, janitors, researchers, and the patients. As described above, the hospital currently uses various different systems for appointment scheduling, room scheduling, administration of hospital staff, patient data management, laboratory, and so on. In addition, a lot of things are still done on paper, i.e., writing prescriptions or transferals. This makes hospital management not only very expensive and discontinuous but also highly prone to errors. For example, the reception is equipped with a simple appointment scheduling system that requires patients to call or physically appear for scheduling their appointments. Furthermore, patient data is stored in a local database for each of the departments. A referral to another department requires to manually transfer the patient's medical record, causing inconsistencies and redundancies that can affect physicians' productivity and, ultimately, patient safety.

Healthcare is a traditionally slow adapting industry, process- and paper-heavy, and resistant to change. Furthermore, most stakeholders are not IT experts. Therefore, the hospital is looking for a user-friendly, integrated solution of a central hospital management system to increase interoperability and efficiency of patient care with the ultimate goal of maintaining the highest level of patient safety.

VISION

The hospital's enterprise architect Ms. Gieske was assigned to take over the project management of implementing the core hospital management system. With her enthusiasm for leveraging ubiquitous technology within healthcare her focus is on 1) providing a continuous, interoperable management system facilitating the electronic exchange of information across departments and beyond, 2) allowing data collection for both prescriptive as well as predictive analytics of clinical data, 3) empowering the patients by including them in their healthcare management, 4) ensuring privacy, data security, and compliance to regulatory processes, and 5) fostering the integration of mobile devices into the core management system.

There is no need to create a system from scratch since there are various hospital management systems available on the market. Instead, the challenge is to find a system that can be tailored to UHOPE's unique requirements and needs. Ms. Gieske is willing to provide you with additional information through a face-to-face interview in her office.