MHA-FPX5062 Assessment 4: HIM Systems Characteristics and Needs

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HIM Systems Characteristics and Needs

St. Anthony's Medical Center (SAMC) is recognized locally and nationally for its knowledge and commitment to people's health (Capella University, 2021). SAMC is part of Vila Health's mission to support individuals' overall well-being. SAMC offers its patients a wide range of services, such as inpatient and outpatient care, post-surgical care, and referrals when needed (Capella University, 2021). Health information technology (HIT) will be widely used in the healthcare sector, enhancing the standard of care, avoiding medical errors, lowering healthcare costs, promoting administrative effectiveness, reducing paperwork, and providing access to affordable healthcare (Tian et al., 2019). At St. Anthony's Medical Center, HIT systems are important in securing sensitive information. This essay analyzes how Health information management (HIM) contributes to internal and external environmental changes. The current healthcare information environment, how the HIM fits the external environment, the interrelatedness of the HIT throughout an organization, HIM needs, regulations and guidelines, and the practices and procedures for securing sensitive health information at SAMC will be recognized.

Current Healthcare Information Technology Environment

The information needed to create a complete picture of the information technology environment in an institution includes the number of technologies in the institution, their functions, the extent of their use, knowledge of the staff on the technologies' existence and usage, and the integration of the healthcare technology into staff members' daily roles. SAMC uses and maintains various information systems, devices, and applications to facilitate patient care and administration of the institution. The institution's Health information systems are divided into administrative and clinical information systems. The specific systems maintained by

the IT department are E-mail, Electronic medical records, a Formulary database, Building/environmental system, Patient flow software, Medical billing, Accounting, and Medical equipment networking.

The hospital's staff is connected, and the resources they use to provide the best treatment possible for patients, thanks to the information technology division of St. Anthony Medical Center (Capella University, 2021). The IT department at SAMC works hard to maintain the technology that enables hospital employees to stay connected to the resources that allow them to deliver the proper patient care. The majority of the staff at the institution are aware of the available technology and its use. However, not all staff members have specialized knowledge of using these technologies. They heavily depend on assistance from the information technology and informatics departments. Therefore, regular training is required to sharpen staff skills and knowledge of using information systems, applications, and devices. It is worth noting that the understanding of the current IT environment was limited due to uncertainties regarding the level of connectedness of different information systems from various departments. Some information systems are managed individually.

Vila Health Hospital HIM System and External HIT

The external healthcare information technology environment comprises the suppliers of technological information systems, servers, regulatory and accreditation agencies, and other external stakeholders to the institution. The Villa Health Hospital's HIM systems fit into the external healthcare technology environment in several ways. Some healthcare technology applications and devices require installation and implementation from suppliers. Therefore, the institution must maintain active interaction and communication with the suppliers. Additionally, the institution heavily depends on external servers to run its information technology systems and

applications. Therefore, there is also a need to maintain an active interaction with the servers. These servers also help when an error occurs or in case of loss of essential data by trying to solve the errors and maintaining information to avoid critical data loss. The institution's health information management system is also connected to the external environment through regulatory and accreditation agencies. For instance, the institution has to comply with HIPAA and maintain recommendations of the Health Information and Management Systems Society (HIMSS). HIPAA requires the institution to maintain patient information privacy, security, and confidentiality, and HIMSS certifies professionals to work with health information systems.

The connection of the institution's HIM to the external technological environment helps it connect with other healthcare institutions and organizations for performance benchmarking and improvement. Additionally, external health information technology also enables the institution to regulate its information systems and offers recommendations that help it maintain health information systems best practices. Certification and compliance with regulatory bodies and agencies also help the institution avoid costly lawsuits and ensure that the health information systems provide patients with safe and efficient care services.

Interrelatedness of HIT Throughout the Organization

Healthcare information technology in any institution must be interrelated to ensure smooth administration and efficient provision of patient care. Pomare et al. (2019) note that interrelated healthcare information technology leads to better care outcomes and the provision of safer care. The healthcare applications used throughout SAMC have been designed in a way that allows them to work together. Applications on clinical information systems bring together applications that facilitate patient care service provision, including patient portals and electronic health records. For example, patient records are interrelated and connected to bring together

patient admission information, diagnosis, treatment, care plans, and discharge information. Although different authorized healthcare providers can access, change, or edit patient records, the interrelatedness helps them coordinate care and effectively communicate amongst themselves. For example, the institution's pharmacists, doctors, and nurses can access similar patient files through the interconnected system.

Furthermore, administrative information systems are also interrelated. For instance, billing, scheduling, operations management, and finance systems are made to work together so that staff in these departments can access the same information from these systems, thus using it to guide strategic planning and decision-making. It is worth noting that healthcare managers are expected to understand a wide range of healthcare applications, facilitating strategic planning and decision-making. For example, healthcare managers can use the system's billing and patient admission information to plan adjustments to healthcare costs. Additionally, healthcare managers can use information from the operations management systems to predict the institution's expenses, thus, plan appropriately.

Unique HIM Needs in the Hospital

Different healthcare institutions have different needs that the HIM system is required to address. According to Argaw et al. (2020), understanding an institution's healthcare information management needs is vital in determining the type of system that can meet the need. The unique HIM needs of the institution include issues with healthcare provider accountability, data security, cost-effectiveness problems, revenue leakages, and problems maintaining good care quality. However, system integration decisions can serve these needs.

The system integration decision to combine patient information from the pharmacists, physicians, nurses, and the laboratory can address the need for accountability and data security.

The integration can allow each authorized member to access patient data, but changing or editing the data can be traced to a specific person if these systems are integrated. Additionally, integrating finance systems with patient billing systems can help address the loss of revenue through leakages and enhance financial accountability in the institution. The management and administration systems can also be integrated to help address the cost-effectiveness needs by reviewing the return on investment for health information systems.

Regulations and Guidelines for Particular HIS

Different health information systems should follow the set regulations, policies, and guidelines. One such system is electronic health records (EHR). The Health Insurance Portability and Accountability Act (HIPAA) has developed guidelines to protect patient-protected health information. According to Moore and Frye (2019), the HIPAA rule requires institutions to maintain patient health information's privacy, confidentiality, and integrity. The rule regulates the use and disclosure of protected health information and sets standards for protecting medical information. The compliance best practices include maintaining technical, physical, and administrative safeguards. These practices help protect data from access from unauthorized persons who may misuse, share, change, or use the information for malicious purposes.

Common Procedures and Best Practices for Securing Sensitive Health Information

There are different ways in which healthcare institutions protect and secure sensitive health information. Common best practices and procedures include using HIPAA privacy and security rules and protecting sensitive information from cyber-attacks and threats. As mentioned earlier, HIPAA-compliant institutions must implement technical, physical, and administrative safeguards. Technical safeguards include installing firewalls and anti-malware software. Physical safeguard practices include keeping offices locked and only allowing authorized persons.

Administrative safeguards include developing policies to secure patient information. These policies may include passwords, encryption, biometric authentication, and proper information disposal policies.

Furthermore, institutions can protect sensitive information from external threats such as cyber-attacks by installing anti-malware software and using the most updated security systems. However, the understanding of relevant information security issues and solutions is limited due to the fast development and changes in information systems. For instance, an institution using a particular information system may find new versions of the systems which require new security safeguards. Therefore, institutions should be apt and keep up with new system advancements.

Systems Integration Decisions and Recommendations

Based on the above analysis, information technology plays a significant role in healthcare. The integration of health information systems contributes to better care outcomes, provision of safe, efficient, and effective care, reducing errors, and enhancing care coordination among care providers. The recommended health management systems integration includes clinical information systems, such as decision support systems, medication administration systems, and patient records, and administrative information systems, such as billing and operations management systems. Pomare et al. (2019) note that systems integration increases efficiency in care provision. Integrating systems also helps protect patient information (Moore & Frye, 2019). However, alternate perspectives show that the integration of information systems makes the entire system susceptible to attack and loss of data of a large magnitude (Butpheng et al., 2020). Therefore, despite the many advantages of systems integration, institutions should implement robust security safeguards. Considering the unique needs of the institution is also vital.

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