Human-Related Factors Influencing Technology Adoption in Healthcare

Healthcare keeps changing with greater attention to patient-centered care being one of the recent concepts. According to Frezza (2019), patient-centered care involves the treatment of individuals with dignity and respect and ensuring their participation in healthcare decisions. Technology is one of the tools that facilitate patient-centered care with tools such as web-based appointment and scheduling systems, aiding Queens Medical Center to provide patient-centered care. By using the medium, people have control over their appointment preferences and enjoy improved access to healthcare. In this regard, the present discussion aims to identify the human factors that may hinder Queen Medical Center’s implementation of a web-based appointment and scheduling system to support the facility’s goal of providing patient-centered care.

Evidence suggests that people’s experiences using technology influences their willingness to adopt new technologies or continue using existing ones. Technology acceptance is an occurrence that involves people’s assessment of their experiences and making decisions after considering the advantages and limitations of the experience (Safi et al., 2018). Therefore, patients who have had bad experiences using technologies are less likely to be willing to adopt the new technology introduced by the Queens Medical Center. For example, people who have experienced bullying on the Internet associated with a health complication may fear a similar experience with the hospital’s web-based appointment and scheduling system. The medical facility should consider this aspect of the human-related factors that affect the adoption of the technology and determine ways to address the problem. Addressing this problem helps to overcome the hindrances that affect the willingness of patients to use the system. Accordingly, the hospital can enhance the adoption of the system to support patient-centered care.

Another human factor that affects the adoption of the web-based appointment and scheduling system is privacy. Holmgren et al. (2022) assert that hospitals gather and store considerable amounts of data related to their patients. The data is critical since it offers healthcare professionals the information they require for decision-making. For example, they can understand and evaluate patients' health histories to inform current medical interventions. The healthcare field has seen increasing pressure to create a consortium to facilitate the collection, storage, and use of patient information to support public health initiatives. However, the situation causes concerns among people regarding the privacy of the information they provide to hospitals. Such fears influence the willingness of patients to use the technologies provided by hospitals. The highly sensitive nature of medical information creates a feeling of uneasiness associated with the potential for misuse and violations (Henkenjohann 2021). Accordingly, patients resist the use of technologies if they believe their information is unsafe. The problem can affect Queen Medical Center's efforts to implement a web-based appointment and scheduling system because patients are unsure of the safety and privacy of data gathered through this system. By responding to this problem, the hospital can increase the willingness of patients to use the system and provide their health information to enable health professionals understand their conditions to develop appropriate medical interventions.

Patient knowledge and capacity to use the web-based system is the third human-related factor that could hinder its adoption. Berkowsky et al. (2017) observe that the willingness of older adults to accept and use technology is related to a number of variables, such as how valuable they view technology to be and how confident they are already in their ability to understand it. Therefore, patients who lack the knowledge and skills to use the technology are more likely to be reluctant to adopt the appointment and scheduling system. Despite the increases in the willingness to adopt technology among patients, older adults are a particularly problematic population since they continue to lag compared to the younger generation. Besides, the knowledge of the benefits of the technologies plays a significant role in the adoption of these systems. The failure to understand the perceived usefulness of technology means people see no benefit in abandoning an existing system (Cheung et al. 2019). Therefore, they are unwilling to adopt technologies introduced by health facilities. Therefore, Queens Medical Center must understand that people’s knowledge and capacity to use the system will influence their willingness to utilize it. Providing information that eases the use of the system will address the challenges they may experience, particularly the problems associated with their understanding of the web-based system. Therefore, the hospital will improve the capacity and potential of using this system among patients.

Queens Medical Center must understand the key human factors that affect the use of its web-based appointment and scheduling system. According to the analysis, the three factors are the experiences of patients, privacy concerns, and patient knowledge and capacity. The medical facility should understand that these challenges decrease the willingness of patients to adopt the system. Therefore, the medical facility should address them to achieve its goal of patient-centered care by implementing a system that empowers patients and reduces waiting time. Knowing the human-related problems and addressing them will result in greater success in convincing patients to use the web-based appointment and scheduling system to improve the provision of healthcare.

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