Individual Essay

The health-care industry is quickly adopting a web-based appointment and scheduling management information system (ASMIS). This system is evolving constantly in order to encourage patients to interact wilfully. Consequently, patients have more options when it comes to scheduling their appointment and have better visibility to information by utilizing the Internet as a platform. The purpose of this report is to identify the human factors and the recommendations to enhance ASMIS usability when scheduling and assisting patient care.

The ASMIS should be developed versatile enough to handle quick adjustments in patient healthcare information and corresponding improvements in important metrics, as per the needs of Queens Medical Care, and offer relevant management making. In general, it is a well-known truth that when human factors recommendations are applied to particular groups, everyone stands to benefit. For example, if a door is built to suit the tallest people, then it will fit the others as well (Zhao et al., 2017).

Before we get into the core of this essay, let us just define Human factor. Human factor is the evaluation of how humans interact with technology and how they make decisions. Work settings and system design interact with human talents and expectations, as well as limits.

There are three primary human factors that have been recognized and their implications for the system, which are:

1. The ability to schedule appointments on a flexible basis

In the medical environment, a real-time web-based appointment and schedule management information system (ASMIS) limits flexibility since automated appointment systems are not sophisticated sufficiently to handle

instances that are not present, such as new-born care. While other sectors such as airplane online booking have rigorous standards for scheduling appointments, medical appointments are dependent on the expertise of doctors and patients, thus they should be more flexible in this regard. Appointment routines are personal to doctors, but patient priorities can be quite unique and alter throughout time, depending on the patient. On the other hand, achieving the same amount of leeway in real-time web-based scheduling systems is a difficult task. Due to the reduced real-time scheduling requirements, doctors must give up some of their preferred scheduling patterns. The process displacement approach is thus recommended, in which patients decide which doctor to see and when to schedule an appointment. Additionally, due to the ability to book an appointment online, patients are not restricted by office hours, which will consequently make the patients more satisfied (Improving Access to Healthcare with Online Medical Appointment System, 2019). As an added precaution, I would suggest using a firewall to control all incoming and outgoing traffic between your server and your browser.

2. Patients must be correctly triaged and risk categorized.

Patients who scheduled appointments using real-time Web-based appointment systems are difficult to screen. Internet-based appointment systems may be abused by individuals with serious medical issues that require rapid attention from an emergency department or severe care facility There are no schedulers anymore, therefore platforms should be able to screen patients properly and categorise their risks. When a patient uses their appointment system for an urgent issue, some organizations post fixed caution warnings on their website. As a result, some real-time systems still rely on humans for emergency detection. Only a few real-time appointment systems can detect emergency situations automatically. However, for the

sake of the system's security, I would propose using encryption in this situation to prevent data breaches.

3. Having to relinquish management of the appointment systems

Patients may misuse appointment systems, which makes many healthcare providers worried about losing control. Examples include patients booking appointments but not showing up or cancelling last-minute. Consequently, precious medical attention would be lost. In order to solve the problem, established appointment rules, such as discontinuation and no-show penalties, should be implemented. To satisfy their schedules, caregivers might also block off appointment times and restrict the sorts of visits. No-shows can be discouraged by barring patients with a tendency of no-shows and gathering co-pays up front before scheduling an appointment. Notifications sent through text and email can also assist decrease no-shows. There are some organizations that decline to publish the available timings of their doctors since they feel that patients will assume that the doctors are idle if they see so many slots. Additionally, the security suggestion for automated email generation would probably be to utilize two-factor authentication, which uses two different authentication criteria to authenticate who you are.

As the final thoughts, we attempted to identify the most important human elements that should be taken into account while developing Queens Medical Care's ASMIS. Because each component is discussed in depth, we may draw unambiguous conclusions about how each one affects the ASMIS.

References:

Improving Usability, Safety and Patient Outcomes with Health Information Technology, 2019. Improving Access to Healthcare with Online Medical Appointment System.

Zhao, P., Yoo, I., Lavoie, J., Lavoie, B. and Simoes, E., 2017. Web-Based Medical Appointment Systems: A Systematic Review. Journal of Medical Internet Research, 19(4), p.e134.