Nursing and Technology

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Technology narrows the gap between two distant places; it reaches far and wide even to the remote areas that seem distant. When it comes to healthcare individuals can access facilities that were once unavailable to their communities due to the effectiveness of the technology. People also have the benefit of accessing specialists without leaving their villages and communities. The result has been an increase in the availability of quality healthcare for those living in distant places improving the timelines of health care which have ultimately led to the reduction of deaths caused by health deterioration or diseases and illnesses. The delivery of health care services to remote areas using technology is referred to as telemedicine in the medical world ("Telehealth Use in Rural Healthcare Introduction - Rural Health Information Hub", 2016).

The Federal Drug Administration mandated with the responsibility of ensuring they regulate the software or equipment that is intended for any use in treatment or diagnosis of a condition or disease. Therefore, some of the requirements are to use in remote settings is that if a device is categorized as a medical device it has to undergo federal drug administration listing and registration, market approval, a mark of excellence for items that have been manufactured and a post market analysis. The FDA regulates what is to be used in telehealth system. Thus, the merged healthcare organizations will have to undergo vetting before they can use remote technology for the underserved populations (Demiris et al., 2008).

The members of the project committee that would be useful for the project to take its course and achieve its purpose includes an information technology specialist who would provide information, ideas and steer the committee on the best technology to use for the project to be a success. A pharmacist would help with knowing the best and most needed medications that should be available. An administrator/ financial officer to overlook the structure, plans and finances that are used in the project and to ensure the project runs smoothly offering the needed administrative and financial support (Demiris et al., 2008). Lastly, a counselor would help identify the psychological needs that the population has and prepare on how best to cater to them. Thus, each team member with their distinct roles would assist in achieving the group’s ultimate purpose which is to provide healthcare to the underserved population.

The information technology expert would be in charge of ensuring the soft wares and medical equipment needed are available and suitable for the given population. It would also be their role to ensure all technological systems are running smoothly throughout the time the services are being provided. They would also handle any arising issues and provide solutions to the problems to ensure the system is running efficiently. A pharmacist would be liable for all forms of medications and laboratory equipment that will be used in the provision of health care to the particular population. Identifying the most common and essential drugs as well as the most efficient drugs would be their primary role. The person would be in charge of all medications issued to the populations as well as all laboratory items that are used during the time the services will be offered ("Hospital technology news", 2000). Thus identifying the common diseases and illnesses that are prevalent in the given location will be part of the role they play in the committee and a starting point to establishing the best medical items that should be carried to the site.

An administrator/ financial officer would be in charge of handling the financial books as well as offering leadership to endure everything set into place runs smoothly. Amongst their many roles would include factoring in all the costs that are to be incurred, ensuring that the staff members are well catered for regarding food shelter and clothing. Also ensuring that all other departments are well financed and are lacking in nothing as they work towards providing quality healthcare. The administrator would handle the specific details of what is needed and draft a budget as well as ensure the funds that are released are used appropriately and in a cost effective manner. The counselor would handle the psychological needs of both the staff members and the community. This would go a long way in ensuring proper mental health is mainatained. Thus, their role in the planning stage would involve identifying the likely psychological needs, disorders, and dysfunctions that are prevalent in the area as well as the most suitable intervention methods. They would also determine the issues that staff members are likely to face and the best coping mechanisms that they can be encouraged to use to ensure they perform their functions in full measure without distractions of any given kind. Having described the committee member’s roles and responsibilities it is clear that they would all play a crucial role in ensuring the project’s purpose is realized. Each member has a distinct role that is in a way connected and dependent on another member’s role. For example, the pharmacist cannot carry out his duties unless the particular medicine he asked for is purchased by the finance officer ("Hospital technology news," 2000).

Interoperability defines the extent that devices and systems can exchange and interpret data. It enables for there to be the better flow of work and reduces ambiguity. It is important to use standardized language when capturing nursing accurate data so that it is easy for anyone who handles the data to understand and interpret it with ease. It also prevents the occurrence of patient’s treatment being mixed up or wrongly administered due to the existence of a language barrier. Some potential threats to health information system include breach of confidentiality, which would negatively affect the patient, and the risk of the systems being infected that could lead to them failing and thus changing the state of health of patients.

Patient’s privacy can be endured by providing security checks and clearance levels for any access to patient’s files and information. This will ensure the staff members are accountable if there is any breach of confidentiality (Demiris et al., 2008). The industry has stringent measures that are set into place to ensure data is protected, and risks are averted. These actions include ensuring that medical staff members who disclose patients’ information face disciplinary measures and that the system has many firewalls preventing any external software from accessing patient’s data.

Mobile devices and laptops are part of the merging technological tools that have been widely used and incorporated in the medical world especially in remote areas. The laptops can be utilized as a training tool for isolated communities on how to handle themselves better regarding hygiene and nutrition to avert sickness. They are also used to keep up to date paperless patient records that can be useful for subsequent visits. The mobile devices such as cellular phones and personal digital assistants are helpful in communication which facilitates the clinicians decision making as they can quickly consult and even ask for more resources to be delivered ("Telehealth Use in Rural Healthcare Introduction - Rural Health Information Hub," 2016).

**References**

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