Assignment

[Author’s Name]

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**Response 1**

It is undeniably true that healthcare information technology is revolutionizing the ways by which nurses used to interact with health-care-related data. Nursing informatics is the field that integrates nursing science with various analytical and information sciences to define, identify, and managing and communicating data and information in nursing practice. Typically, in the healthcare system, nursing informatics is utilized to manage electronic healthcare records.

High-quality patient care and effective management of conditions are only possible with the help of informatics in the healthcare systems. Nursing informatics is a career that provides patients with high-quality care and plans for their conditions of disorders. Patient engagement and participation in managing critical states are essentially important (Hylock & Harris, 2017). Nursing informatics is a novel field that plays an important role in the development of dynamic healthcare systems such as mobile appliances and applications of informatics to facilitate patients with maximum quality care. The health of communities can be significantly improved with the informatics systems in healthcare facilities. Advanced systems of diagnostics, precise nursing, and regular monitoring by informatics nurses can achieve better health of communities (Hylock & Harris, 2017). Effective delivery of services in the least time would be achievable in the future with the help of informatics in healthcare. These nurses are specially trained with a major focus on how to use and operate informatics in healthcare. Informatics nurses can efficiently deliver their services to the patients, and prompt recovery is possible. Several health apps can be downloaded in mobiles to access healthcare services. These applications can provide patients with access to physicians to get help regarding their conditions. This is an ever-increasing pace in the healthcare facilities to develop systems for the better delivery of quality care to reduce the burden of disease from communities.

**Response 2**

Connected health is a term used in recent healthcare systems that refers to the use of advanced technology along with the delivery of healthcare. It is a model of the socio-technological system in healthcare systems (Wu et al., 2017). Major challenges in the provision of connected health are mHealth and eHealth. Therefore, connected health is a novel term that means the utilization and integration of smart technology in testing, diagnosis, and development of healthcare services. mHealth is mobile health that is utilized specifically for the support, access, and monitoring of the health of patients.

**Example 1**

Patients suffering from obstructive sleep apnea and related disorders are being provided with facilities of telehealth, and through mobile appliances, they can monitor their health as well as have access to a healthcare provider to health them in self-management (Wu et al., 2017). The benefits of this technology include the timely management of patient's condition; however, major challenges are awareness and use of technology by the patients.

**Example 2**

Advanced technology and its use in healthcare facilities are in the treatment of cancer patients such as blood pressure cuff and weight scale connected with Bluetooth devices for sending updates of patient’s symptoms to physicians. The use of smart technology has helped patients to manage their symptoms effectively. It helped physicians to treat and respond timely through tracking these apps.

**Example 3**

Use of smart continuous glucose monitoring pens and insulin pens to monitor a patient's glucose level. These apps have helped patients to administer their sugar levels to prevent themselves from complications.

**Major Challenges and Drawbacks**

Major challenges in combating these application facilities are awareness, utilization of facilities, and how to use these apps effectively (Hylock & Harris, 2017). It is important to provide healthcare facilities with all the systems for the secure use of technological appliances for complete benefits of connected health. It is also important to provide complete privacy and quality to achieve the complete potential of connected health. Engagement of medical health staff and team is essentially important to meet the challenges of connected health.

**Response 3**

Informatics has changed the context of the healthcare facilities by providing the opportunity of advanced technology. These services have facilitated patients as well as nurses and physicians to effectively manage and treat conditions. Major benefits received by the patients are those having complications that require time management and regular monitoring such as obstructive sleep disorders, diabetes patients, and cancer patients. It has provided a health system with advanced healthcare services with precise diagnostics utilizing advanced technology. For example, utilizing mobile services in the provision of healthcare services will enable patients with accurate diagnosis and better recommendations along with better-personalized health. This technology help patients with self-management and self-monitoring of their health (Goreva et al., 2016). It utilizes various appliances such as mobile phones, advanced technology, and a system of telehealth with the provision of healthcare services. Record of a patient's history and diagnosis with previous medical history is essentially important for better treatment (Richesson et al., 2019). It is helpful only in the system of advanced technology utilized in the healthcare facilities. Therefore, public health has been improved by the utilization of advanced informatics systems.

Diabetic patients is the second major example that has provided the facilities. For instance, continuous glucose monitor helps patients to record and monitor their glucose level as a higher level as well as lower levels of blood glucose is a life-threatening condition for the patient (Hylock & Harris, 2017). Therefore, utilizing continuous monitoring have helped physicians to monitor patients and timely provision of treatment therapies.

Thirdly, informatics has improved healthcare systems with better patient outcomes and improved patient records. For example, retrieval of medical data for the patient's treatment plans is essentially helpful if there is no one with the patient. It has helped several patients with better care opportunities and their engagement in managing their critical conditions, such as devices to help them monitor their conditions.

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