**HEALTHCARE TECHNOLOGY**

First Name, Middle Initial(s), Last Name

Author's Affiliation

Course Number and Name(s)

Instructor's Name

Assignment Due Date

University of Phoenix Material

Health Care Technology Terms Worksheet

**Select** 10 of the following terms and complete all three columns for each term selected.

| Technology Term | Definition and Purpose:  Explain each term in your own words using complete sentences. | Example in Health Care:  Identify an example of each term and discuss how it is used in health care settings. | References:  Provide two APA-formatted references to support your claims for each term. The course textbook(s) may be one source. The second source must be reputable; Wikipedia may not be used as a source. |
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| Clinical decision support | Clinical decision support (CDS) provides physicians, nurses, patients, and others with expertise and person-specific information intelligently filtered or delivered at the right time to improve health and health care (Morilla et al.,.2017). CDS is a collection of resources designed to improve clinical decision-making. | Diagnostic support, such as MYCIN and QMR, are examples of different types of clinical decision support. When applied to cardiovascular disease prevention, it can help clinicians in various ways, such as reminding them to scan for cardiovascular disease risk factors, flagging cases of hypertension, providing information on treatment plans, asking questions about medication adherence, and providing personalized advice for behavior changes. |  |
| Data | Medical (clinical) data, in general, refers to health-related information that is collected as part of routine patient care or as part of a clinical trial program (Hebda et al., 2018). As this is a fairly broad concept, there are numerous categories of such data. | An example of Data is medical imaging data. In healthcare, the information is used to study new advancements, cut costs, and even cure or avoid disease onset using precise statistics from a population or a person. Rather than relying on their knowledge and expertise, providers increasingly rely on extensive data analysis. |  |
| Data integrity | Data integrity refers to the quality and continuity of data throughout its existence or for as long as it is kept and used by an entity. | Electronic health records are one of the most fundamental data integrity examples. Since data integrity is used to classify and monitor patients as they transition from one level of treatment to another, it is critical. Data is used to verify an individual's identity to ensure that the correct patient receives the proper treatment and facilitates billing operation. |  |
| Data management | All practices related to handling health data as a valuable resource are included in data management. According to legal or technical standards, validation and monitoring of data are also part of health data management. | Health Data Management allows you to incorporate and analyze medical data to enhance patient care and extract information to improve medical outcomes while maintaining data protection and privacy. Medical records provide essential and confidential information regarding a person's health. |  |
| Data mining | It is the process of analyzing large data sets to find trends and then using those patterns to predict future events or forecast (Hebda et al.,2018) | Data mining, for example, can assist healthcare insurers in detecting fraud and violence, healthcare companies in making customer relationship management decisions, doctors in identifying appropriate procedures and best practices, and patients in receiving quality and more accessible healthcare. |  |
| Databases | A database is a set of data that has been structured for storage, retrieval, and accessibility (Hebda et al., 2018). There are various databases, but the OLTP (online transaction processing) database is the most popular in healthcare. | Examples are the Costing system and  Patient satisfaction. Laboratory and Clinical data are automatically entered into healthcare databases by healthcare providers.   Databases in the healthcare field can generate real-world proof (RWE).  Ambulatory surgery. |  |
| Data cleansing | It is the process of detecting data that is incorrect, out of date, redundant, formatted incorrectly, or incomplete data and then removing and correcting the Data | For example, one organization hired a contractor to assist in a 10-month data cleansing effort that included an analysis exploring the hospital's entire identity integrity process. The root cause of every duplicate was documented, and a resolution plan was created. |  |
| Electronic health record (EHR) | A digital representation of a patient's paper chart is called an electronic health record (EHR). EHRs are patient-centered, real-time documents that make information accessible to approved users immediately and safely (Hebda et al., 2018). Although an EHR system does include a patient's medical and care history, it is designed to go beyond the standard clinical data gathered in a provider's office | Age, gender, race, health history, medications, immunization status,  lab test results, hospital discharge orders, and billing details are included in EHRs. They can record diagnostic tests and medical treatments, assist with clinical decisions, and improve coordination among healthcare workers. Furthermore, there is an increasing need for extroversion. |  |
| Electronic medical record (EMR) | EMR is a digital replica of the clinician's paper charts. Patients' medical and treatment histories in a single practice are stored in it; they have many benefits over paper records (Hebda et al., 2018). Clinicians may, for example, use EMRs to Monitor data over time. | They can record diagnostic tests and medical treatments, assist with clinical decisions, and improve coordination among healthcare workers. Furthermore, there is an increasing need for broad data sets to be extracted from EHRs for clinical audits, administrative reporting, and analysis. |  |
| Scope creep | Scope creep is known as a project's propensity to grow in size and complexity as more people become involved (Hebda et al., 2018). As the project progresses, it is described as the continuous expansion of the project's reach. | Small specifics of the project's facets are easily missed, for example. The small details that were not planned in this case turned out to be a new building network. It's a good idea to look over the project and see who could be causing scope creep; This will assist you in identifying the problem early on and determining your approach to resolving it. |  |

**References**

Hebda, T. L., Hunter, K., & Czar, P. (2018). *Handbook of informatics for nurses & healthcare professionals* (6th ed.). Pearson.

Morilla, M. D. R., Sans, M., Casasa, A., & Giménez, N. (2017). Implementing technology in healthcare: insights from physicians. BMC medical informatics and decision making, 17(1), 1-9.