Gillespie and Otte of SSOE to present "Knowledge Management! - The New Penicillin"

Health Facility Institute's 23rd Annual Conference "The Future of Healthcare Facility Development"

What is connected healthcare?

Connected healthcare is a delivery method that places the care giver and patient at the center of the available information stream at the most appropriate time, and in the most appropriate format and media.

The concept places a premium on reliable, accurate, secure, and timely information that can be accessed across a variety of platforms and is constantly monitored for optimum performance.

By leveraging IT and healing information across multiple networks to facility information sharing, connected healthcare ultimately leads to improved patient outcomes.

As a method of healthcare delivery connected healthcare relies on the inclusion of healthcare IT to facilitate the accessing and sharing of information, as well as subsequent analysis of health data across healthcare systems. This connectivity encourages communication and collaboration among all of the various stakeholders involved in a patient's health. Healthcare facilities and systems need to analyze their present and future network and connectivity needs as proper planning today can reduce costs in the future. Here are some basic terms and their definitions.

- **Healthcare IT:** The network that manages health information across systems and its secure exchange between consumers, providers, government, quality entities, and insurers.

- **Electronic Medical Record (EMR):** a digital version of the paper charts in the clinician's office.

- **Electronic Health Record (EHR):** the medical and treatment history of the patients in a single practice.

- **Health Information Exchange (HIE):** The mobilization of healthcare information electronically across organizations within a region, community, or hospital system.

While the issue of whether EMR/EHR systems reduce costs still remains in question, there are three clear advantages to their use.

- **Clinical efficacy:** Ability to reduce administrative activities and costs, eliminate duplicate lab and radiology tests, and improve patient safety through 24/7 access to comprehensive, legible medical records and streamlined access to patient medical histories and vital information. The goal is to improve the patient experience and support clinical decision-making.

- **Shared knowledge:** Use of HIE and connectivity can help reduce medical errors and improve the quality of care. The benefits include drug interaction alerts, sophisticated tools to enhance clinical decision-making through evidence-based care protocols, and innovations and new capabilities in population care which increase the potential for preventative and low-cost care for chronic conditions.

- **Care transformation:** Analysis of historical treatments and records and use of advanced analytics can improve and support clinical decision making, population health management, and the creation of new care delivery models, including patient self-management and better coordination across settings.

Connected healthcare requires a robust and reliable network that should be compatible with an organization's vision and objectives, and be governed by clear standards of health information interoperability and exchange. This approach also requires that a coherent healthcare IT architecture is at the forefront at all times to ensure interoperability. This will assure that although, many systems have different methods of communication, all systems will be able to communicate on the same platform. Many systems are based on ad hoc solutions, that are difficult to utilize and typically result in complications and inefficiencies. Healthcare IT infrastructures must also be flexible enough to adapt as the needs, demands and aspirations of citizens, clinicians, and health managers change.

Connected healthcare is not transforming the practice of medicine or the delivery of care – it is responding to the need for more accurate and timely information at the point of care.

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