Health information technology increasing the quality and efficiency of healthcare...

Technology, Information Technology



Abstract

Health Information Technology: Improving the Quality and Efficiency of Healthcare and Reducing Medical Error

Medical science is a data driven discipline. Quality health care relies on the ability of providers and patients to gather together complex information from a variety of sources. In an ideal setting, a medical practitioner can rely on traditional handwritten medical records to manage patient care; however, studies have shown miscommunication is the leading source of medical errors in either the clinical or hospital setting (Khairat 2010).

New advances in health information technology can help decrease medical errors by providing timely and accurate information from a range of sources. Health information technology can also improve the efficacy of care and lower health costs by reducing the number of repeat medical tests often required when patients consult different healthcare providers.

Health information technology can also reach beyond the traditional setting by providing home telemonitoring for patients in need of prolonged medical attention, such as the elderly or disabled, or people with chronic diseases. Electronic home monitoring equipment can improve quality of care and patient safety. The system can be customized to set risk thresholds, remind patients when to take their medications, and help patients learn to selfmanage their condition. It can also be set up to alert care providers.

However, there are some drawbacks, including patient noncompliance or equipment malfunction, which can pose serious risk to the patient. In

addition, home health benefits tend to be costly for patients, even those under Medicare insurance.

References

Khairat S., Gong Y. (2010). Understanding effective clinical communication in

medical errors. Studies in Health Technology and Informatics, 160, 704-708.