Role of Information Technology in health care

Introduction: Information Technology (IT) is one of the popular and used topic now a days. Every where IT is common material for development. IT is also playing a vital role in health care all over the world. It is so vital that there is a term or branch "**health information technology**" (health IT) , which is a broad concept that encompasses an array of technologies to store, share, and analyze health information.

More and more, health care providers are using health IT to improve patient care. But health IT isn't just for health care providers. Anyone can use health IT to better communicate with doctor, learn and share information about health, and take actions that will improve quality of life. Health IT lets human be a key part of the team that keeps us healthy.

Health Information Technology: A Tool to Help Clinicians Do What They Value Most Health care professionals like we play a vital role in improving the health outcomes, quality of care, and the health care experience of patients. Health information technology (health IT) is an important tool that we can use to improve clinical practice and the health of our patients. Health IT can help health care professionals to do what we do best: provide excellent care toour patients.

Health IT encompasses a wide range of electronic tools that can help:

• Access up-to-date evidence-based clinical guidelines and decision support

• Improve the quality of care and safety of our patients

• Provide proactive health maintenance for our patients

• Better coordinate patients’ care with other providers through the secure and private sharing of clinical information

Health IT can help you to solve clinical problems with real-time data:

Quality improvement and clinical decision support rely on information about our patient population being readily available in digital form. Health IT can help us monitor our patients’ health status and make specific and targeted recommendations to improve our patients’ health.

Access to real-time data through electronic health records and health IT will help us:

• Use clinical decision support to highlight care options tailored to our patients

• Improve safety by highlighting drug interactions or allergies when ordering medications

• Connect patients with community and educational resources to better manage their health

Health IT helps us to implement quality improvement within our entire practice population.

We can run reports to see who is due for a visit, overdue for a mammogram, or whose A1C, for example, is out of recommended range.

Health IT-enabled registry functions can help you:

• Provide proactive outreach to patients

• Improve prevention and treatment outcomes by focusing on both patients being seen and patients who need to be seen

• Focus practice resources on care that will provide high impact

• Create benchmarks that monitor patients’ health progress and overall health status

Health IT helps us track the referral process. Electronic referral management is an alternative to the paper-based referral process that frequently burdens practices and organizations.

Electronic referral management helps providers:

• Enhance the efficiency of the patient’s health care experience

• Improve information exchange within and across organizations

• Enhance the continuity of care for their patients

• Improve efficiency and put an end to the time-consuming and error-prone processes of filing and sending paper referral documents.

Health IT helps to improve communication and coordination among health care providers involved in the patient’s continuum of care. Practices are able to securely route copies of visit summaries and procedural notes to another physician or health care setting when a patient requires additional follow up or referral regarding their care/diagnoses. Health IT improves care delivery organization efficiency with administrative processes. Health IT can improve the administrative processes and workflows of your practice.

The advantages to using Health IT in your practice include:

• Applications and tools to support clinical processes, i.e., text messaging appointment reminders to your patients.

• Faster data processing for you and your staff – including sending and receiving your patients’ lab results faster

• Timely and improved access to information needed before, after and at point-of-care – including access to your patients’ electronic health records and diagnostic test results remotely .

Health IT gives care providers the tools to manage patient information so they can better manage patient care. Federal programs have helped to accelerate the implementation of health IT in hospitals and ambulatory settings; however, no tool is effective unless it is used properly. Health IT is helping providers in the United States make better decisions, reduce costs, and improve outcomes for their patients and communities at-large.

**Health Information Technology also includes:**

Clinical decision support: Clinical decision support provides timely information, usually at the point of care, to help inform decisions about a patient's care. Clinical decision support can effectively improve patient outcomes and lead to higher-quality health care.

Multiple Chronic Conditions: As part of its ongoing effort to improve care for patients with multiple chronic conditions (MCC) through evidence-based research, AHRQ has funded the AHRQ MCC Research Network. The Network aligns with a Department of Health and Human Services' effort to address MCC issues.

Research Centers for Excellence in Clinical Preventive Services: AHRQ has funded three Research Centers for Excellence in Clinical Preventive Services focusing on the delivery of preventive services in the clinical setting. Each center is conducting three research projects seeking solutions to the problems of underuse, overuse, and disparities in use of preventive services.

E-prescribing : The Blues have collaborated with large customers and industry leaders to lead on electronic prescriptions. Physicians who use electronic prescriptions can view patient records, confirm medications and dosages listed on formularies and know what medications have already been prescribed by other doctors. E-prescribing helps eliminate problems with illegible penmanship, reduces pharmacy staff time and avoids paper waste. Michigan ranked No. 2 nationally for the number of e-prescriptions filled in 2009, according to Sure scripts.

Electronic transactions : BCBSM since 2008 has been helping business partners and providers prepare for the 2012 deadline to implement EDI 5010, a new, federally mandated electronic transaction standard. The changes will enhance business functionality, clarify data ambiguities and support the new National Provider Identifier number required under the Health Insurance Privacy and Portability Act.

New ICD-10 medical code set: With the rise of electronic medical records, e-prescriptions and connectivity between providers and specialists, the Blues have responded nimbly to maintain market leadership. For starters, the company is on track for early implementation of ICD-10 medical code billing standards, which will provide greater ability to measure health care services and monitor population health, provide better data and cut down on paperwork when submitting claims. Our process for associating the new codes in our systems have been featured at national forums and adopted by other insurers. We’ve also made our solution available to other health care entities to keep implementation costs down..

Consumer health IT applications: There is a lots of applications like as **“BetterDoctor” (San Francisco), “Blue Star” “(Baltimore) “CareZone” (San Francisco) etc. which probides health information and tips to stay well. Some application may found here “ http://www.beckershospitalreview.com/healthcare-information-technology/50-healthcare-apps-for-clinicians-and-consumers-to-know.html”**

AHRQ's National Resource Center for Health IT serves as the link between the health care community and the researchers and experts who are on the front lines of health IT. The National Resource Center encourages adoption of health IT by providing the latest tools, best practices, and research results from this unique real-world laboratory.

These healths IT resources include:

Workflow Assessment for Health IT Toolkit

Health IT Tools and Resources

Health IT Literacy Guide

Why Is Health IT Important?

Health IT makes it possible for health care providers to better manage patient care through the secure use and sharing of health information. By developing secure and private electronic health records for most Americans and making health information available electronically when and where it is needed, health IT can improve the quality of care, even as it makes health care more cost effective.

With the help of health IT, health care providers will have:

Accurate and complete information about a patient's health. That way, providers can give the best possible care, whether during a routine visit or a medical emergency.

The ability to better coordinate the care given. This is especially important if a patient has a serious medical condition.

A way to securely share information with patients and their family caregivers over the Internet, for patients who opt for this convenience. This means patients and their families can more fully take part in decisions about their health care.

Information to help diagnose health problems sooner, reduce medical errors, and provide safer care at lower costs.