Nut1 task 2 essay

Western Governors University NUT1 Task 2 EMR , Electronic Medical Records, refers to paperless, digital and computerized systems to maintain patient data, increase efficiency, reduce documentation errors and increase direct patient care. Although these types of systems have been around for more than twenty years, new technology is producing systems that are interchangeable with physicians and hospitals across the country, or are “ inter-operable”. With access to this new technology, efficient patient care is only a “ click away”.

Important information, such as Blood type, prescribed medications, medical conditions, allergies and medical history can be shared with doctors at any facility where the patient needs care. An EHR or electronic health record is an EMR that goes beyond the patient’s medical record to encompass information shared between providers and other health organizations including laboratories and imaging facilities. (Garrett & Seidman, 2011) Increase in Quality of Care Nurses are the largest group of healthcare information technology users. Nurses are aware that the electronic management systems can enhance the quality of care a patient receives.

Electronic medical records can make practice guidelines available at the bedside and better organize patient information such as medical history, current medications and test results. Any authorized healthcare professional can access the patient’s records quickly. There is no need to search through a huge file looking for laboratory results, which is time consuming and can be frustrating. Healthcare providers get real-time information on their patients and this is valuable in any emergent situation.

Real-time information is also important when discharging a patient. Nurses, physicians and technicians who are “ on-call” can have remote access to their patient’s medical information allowing for providers at the bedside to begin treatments quickly. EMR’s can provide alerts and reminders of when tests are due. They are helpful in improving care outside the facility through disease tracking systems that can identify potential problems.

These tracking systems can also remind providers of upcoming vaccinations, pap smears, and mammograms which assist providers in managing their patients who have complex or chronic diseases. EMR can reduce or eliminate treatment, procedure and medication errors. No longer will a nurse try to decipher a doctor’s illegible handwriting on an order. Electronic prescriptions and orders are safer for the patient because spelling errors no longer occur. The system can alert a health care provider of medication allergies, drug interactions and dangerous medication reactions with the click of a mouse. While EMR offers great promise in increasing Quality of Care, there are pitfalls.

As nurses have observed, proper training of the healthcare team is essential to Quality of Care. Extensive training is mandatory. To fully integrate an EMR system requires time and attention. Successful implementation of an EMR is the first step to proficient use. Proper training can help nurses contribute and use their proficiency to deliver the best bedside care to their patient.

Active Nursing Involvement Nurses are critical members of the healthcare team. Nurses need to be involved from the very beginning of the process of adopting EMR for private offices or EHR programs for hospital-wide use. The

nurse’s perspective on the current workflow and workflow inefficiencies can help determine the specific EMR/EHR needs of the organization. Nurses should be consulted on the use of work-stations versus hand-held devices such as iPads, laptops or tablets. Experienced nurses can assist in choosing a program that will improve efficiency within the organization.

Nurses need to be involved in the training programs for the new EMR. Super-users should be identified and be thoroughly trained so they can be a resource to the nursing and ancillary staff. The nursing staff will relate more easily to a nurse super-user as they are learning the system. Proper training will help eliminate errors both in documentation and medication/procedural errors. If nurses are not involved in the decision process, this can lead to issues of an EMR being implemented which does not serve the needs of the nursing staff.

This can cause poor acceptance and frustration during implementation. Hand-Held Devices With the advent of the “ Smart Phone” along with iPads and tablets, many health care providers are already using Hand-held electronic devices at the bedside. These devices offer nurses more quality time with their patients. Having immediate access to patient notes can help streamline nursing assessments through the use of up to date “ templates”. The nurse will have patient information at her fingertips. It will no longer be necessary to leave the room to search for the chart you need or enter nursing notes at a nurse’s station.

This alone can save immeasurable time and offer the nurse more time at the bedside. This in turn enhances patient satisfaction. These handheld devices

serve to deliver quality care and improve patient outcomes. (Johnson, 2008) Along with changes in how data is collected and stored, these handheld devices change the way a nurse interacts with her patient.

A nurse can chart while educating and treating her patients. This allows for open nurse/patient communication which benefits both because at the heart of nursing is quality, hands-on patient care. Security Standards The safety of patient data is a priority that cannot be downplayed. Patients worry about their private medical information and trust that it will be kept private. The Health Insurance Portability and Accountability Act (HIPAA) was initiated in 1966 as a standard for protecting individually, identifiable health information. This act went into effect April 2003 and provides strong safeguards to protect the security and privacy of a patient’s medical record.

US Dept. of Health and Human Services [HHS], 2003) HIPAA requirements grant patients several key privacy and security rights of their medical records. Private medical information disclosures must now be tracked. Patients now have control as to who can have access to their medical information. This act now provides stringent, structured protection of EMR compared to paper charts due to the risks associated with data collection and storage.

With electronic records inappropriate access manifests itself in different ways. An authorized used can violate the use conditions. For example, a celebrity is hospitalized and a nosey nurse accesses the patient’s data to “ find out” why they were admitted. Or a vengeful employee can try to access unauthorized information then damage a system or disrupt operations.

Because of HIPAA safeguards being in place, we have password protection and log-in specific codes. EMR’s also have technical safeguards such as firewalls and encryption codes in place. At Bakersfield Family Medical Center, an employee is given specific access to only the areas of the EMR they work with as needed by their position. A “ pop-up” alert “ You do not have access to this program. Please contact your supervisor” appears if a user enters a “ specific access only” area of the program.

Physical safeguards involve educating the staff. Keeping your log-in or password to yourself. Log off your computer at lunch and after your shift. Don’t share your passwords or let another employee use your computer if you have not logged off first. Data storage and Back-ups are encrypted. The most important safety measure is to educate your staff about the policy guidelines, HIPPA and how to care for electronic devices.

Healthcare Costs EMR and EHR programs are expensive. From several hundred to several thousand dollars for EMR programs to hundreds of thousands of dollars for EHR programs for Hospitals and skilled nursing facilities. There are programs that are free and cloud-based such as “ Practice Fusion”. The Chief Information Officer Consortium (CIOC) held a forum in 2011 and came up with a cost of $250 – 300, 000 for s single facility of a “ typical 25 facility 25-facility chain providing nursing care and rehabilitation services. CIO Consortium [CIOC], 2011) The costs also include training staff- the lower end do not cover training whereas this is usually built in to the higher end EMR programs. In addition costs must include new hardware – computers, routers, printers, etc.

as well as implementation expenses. Annual maintenance cost needs to be factored in along with a contract for an in-house IT specialist if one is not already employed. (Mehrota, 2013) Some of the costs of EMR/EHR programs can be defrayed by the Health Information Technology for Economic and Clinical Health Act (HITECH) Act) within theAmerican Recovery and Reinvestment Act (ARRA) in 2009. This program incentivizes Medicare and Medicaid providers to convert to EMR. The providers must show that the EMR is used in a " meaningful way". For individual providers, CMS outlines 24 " meaningful use objectives".

A physician must meet at least 19 of these to apply for the subsidy. (" An EHR Primer," 2013, para. 7, 8) The cost savings from using EMR/EHR can be enormous. A Rand report in 2005 estimated that if 90% of medical providers converted to EMR there could be savings of $77 billion or more just from annual savings from efficiency improvements. Added to that would be the savings from reduced medication and procedural errors which would decrease hospital and provider visits. They estimate preventing over 200, 000 adverse events per year and savings of over $1 billion dollars per year.

In addition, health outcomes could be improved by disease prevention and chronic disease management. (" Can HIT lower costs? " 2005). For a providers office, there is also the cost savings of buying and storing medical charts and the salary of the person in charge of the medical charts. These savings can amount to $20-30, 000 per year for an office. There can also be a reduction in malpractice premiums with conversion to EMR.

More accurate coding of patient encounters leads to increased reimbursement rates. (Silverman, 2009) Recommendations One of the first issues an organization needs to make when choosing an EMR is whether to use a client-server-based system or a web-based system. The most common EMR programs in use today are client-server-based system where the EMR software is installed on a computer server. The organization purchases a license for the software and hardware to access the software. The start-up costs are much higher than for web-based systems but over an extended period there are cost-savings.

The break-even point occurs around five years. Client-server based systems can be coupled with the use of " thin clients" – a computer terminal which depends on the client server to do its computations or work. With the use if thin clients a server based system can be very efficient, secure (thin clients have no local storage) and be highly scalable. The drawback is that if the server goes down then none of the thin clients can continue to work. There also must be a thin-client for every location needed to perform functions such as outside each patient room.

The server must also be physically secure from theft, damage or power loss. (Horvath, 2009) The newest form of EMR programs are web-based or " cloud" based. The users usually pay a monthly subscription fee to access the EMR rather than purchasing it. Any computer that can access the internet can access the program. Some observers believe that for hospitals, large practices and those with multiple offices a client-server based EMR is best. But for smaller groups a cloud-based system may be better.

Tera Roy, Specialty Director, Opthamology at NextGen Healthcare says that “ with or without stimulus dollars, healthcare is headed to the cloud. ” (Pollack, 2011, para. 8) Some of the drawbacks to consider : the practice is unable to function if the internet or access to internet goes down, the host controls the patient data not the practice, data can be lost if vendor goes out of business, if paying a monthly fee, it becomes more expensive after 5+ years. I reviewed 2 EMR programs, PRACTICE FUSION and NEXTGEN. Practice Fusion is a cloud-based EMR program which is currently free of charge and includes free on-line training and support. Used more for a solo practice or large multiple location groups, this system is easy to learn and operate.

The medical charting templates are flexible and customizable to specific practice needs. The patients “ face-sheet” shows an updated list of Diagnoses, Medication list, Advanced Directives, Past Medical History, Immunization records and automatic CDC growth charts. There is a scheduling function with automatic appointment reminders for patients. The system also allows for online booking. Patients can schedule their own appointments in unfilled slots. The system allows you to send an electronic prescription (e-Rx) to any pharmacy in the country.

Referrals to other providers are done online and the appropriate patient notes sent to the providers e-mail address avoiding faxes. Patients can also be given access to their files through the Patient Health Center, this gives them access to their diagnoses, medications, lab results and future appointments. It cuts down on patient calls to the provider. Practice Fusion helps providers monitor their “ meaningful use” to qualify for the HITECH stimulus funds.

There is a “ meaningful use” dashboard that monitors the attestation dates and meaningful use criteria on a daily basis. This will help defray any hardware or other costs involved in changing over to EMR. Practice Fusion will also be available for use with iPad to view upcoming appointments, access existing patient charts and chart SOAP notes. Billing is done by creating a superbill and printed for the patient or exported in a file for the billing office.

There are currently over 70, 000 users serving 8 million patients. (“ Practice Fusion,” 2013, para. 1) NextGen Healthcare Software offers medical software for Hospitals and health systems, group practices and small practice groups. The hospital systems program connects to large, multiple-location organizations to share clinical and administrative data.

NextGen offers flexible and customizable software to integrate administrative and clinical data. For small offices they also offer inexpensive software-as-a-service options that will minimize the costs. NextGen is ICD-10 compliant. The software has clinical templates for over 25 subspecialties. There are templates for specialty-specific Patient Histories, Procedures, and assessments The program has interfaces for laboratories as well as multiple diagnostic devices such as electrocardiograms and spirometry machines. The E-prescription module allows for electronic ordering of prescriptions.

Each prescription is checked against the patient’s diagnoses, medication history and allergies to avoid possible drug interactions. There are security features to protect patient data privacy. There are also image management

capabilities that allow for scanning and importing of medical image data. Referrals are sent electronically.

Patient data is collected and reports can be generated for outcomes analysis, medication recalls, business analysis, etc. There is an E& M code (Exam and Medical decision making codes for billing) calculator to prevent lost charges and maximizes reimbursement for the practice. Providers can, during a patient encounter, print Healthwise Patient instructions from templates. They can be printed in English or Spanish. There is also a module called NextGen Patient Portal where patients can get information on their disease and disease management tools. NextGen is also certified so the data can be “ meaningful use” to qualify for HITECH funds.

With NextGen mobile the provider can use any Apple or Android phone or table to access their patient data, send prescriptions and capture charges. Another innovation is the NextPen – a digital pen solution that captures any written or drawn information by a patient or provider. The data is then transferred via a USB docking port directly into the NextGen Ambulatory EHR after being approved by the provider. “ NextGen Hardware,” 2013) During the Implementation phase, NextGen is involved in evaluating the organization’s workflow to help design the EMR’s system capabilities to increase efficiency and maximize return-on-investment. They offer multiple training sessions for the staff in order to have a successful “ go-live”. Providers can attend live sessions, self-paced online e-learning and train virtually by WebEx.

During the first six-nine months a customer care specialist is assigned to the organization to help the transition to EMR/EHR. The 2-year cost for a system including hardware, software, training, installation and support can run around $80, 000 for a 2-provider office (“ Price comparisons,” 2005, p. 1) NextGen mobile costs $660 for installation, implementation and training plus monthly fees. The NextPen costs $2000. (“ NextGen Hardware,” 2013) I have not personally used either of the systems I researched, but I did have fun playing with the demo’s.

I would choose Next Gen without question. Next Gens systems complete integration in both inpatient and outpatient settings offers so much in the future of healthcare. Next Gen makes it so easy for all the healthcare users to have patient information at their fingertips. Clinicians work with the developers to focus on what is needed in an EMR. Fully intergrated software in real time with automatic upgrades built in.

NextGen also has a long standing solid reputation in EMR systems. I found that the nursing templates were logically placed and easy to use taking less time to chart. Nurses notes really are just a “ click” away. The Healthwise Knowledge Base in the patient portal is a great assistant to patient education.

This offers any patient easy accessibility to learning about their disease/syndrome at point of care. I also thought the Customer Care Specialist who helps during the Implementation Phase and can stay with your organization for 6 to 9 months following implementation is an excellent selling point. To me NextGen is an EMR system that will grow with a practice,

clinic or hospital. Next Gen seems to have all the bases covered when it comes to deciding on the EMR that best suits the needs of your Medical Practice, Clinic and IPA.