Electronic health record essay

ASSIGN BUSTER

In the proposed scenario. a Clinical Nurse Specialist (CNS) with a Post-MastersNursingInformatics Certificate has decided that the 100 bed infirmary that she works in would profit from transitioning from paper charting to utilizing an electronic wellness record (EHR) system. She has done initial clinical research and has a solid foundation of best-patient-practice grounds that support this alteration. She has besides researched and studied the information on the government's websites HealthIT. gov. and CMS. gov refering to the American Recovery and Reinvestment Act and theHealthInformationTechnologyfor Economic and Clinical Health (HITECH) Act of 2009. HITECH is a stimulus bundle approved by the US authorities leting $ 19 billion dollars to be divided between infirmaries and physicians " who demonstrate " meaningful use" of electronic medical records" (ARRA HITECH Solutions. 2015) . She knows that the best manner to choose and establish an EHR is to piece a squad of members with assorted fortes refering to the ends outlined in the phases of HITECH. Stage 1- Data gaining control and sharing. Stage 2- Advance clinical procedures and Stage 3- Improved results. Each of these phases has it's ain meaningful usage standards. As seen in the diagram to the left.

The CNS Begins by taking the members of her squad from assorted subjects in the infirmary. Because this will intend corporate broad alterations and acceptance. Her list includes the following. from the IT section. a Clinical Nursing Informatacist- chosen for a forte in how nurses interact with package and what is required for nurses to efficaciously care for patients. and the Director of Clinical Informatics- chosen for an overall cognition base of the infirmaries information sciences resources and demands including what

package and hardware is presently available. what has worked or failed in the yesteryear and what alterations will necessitate to go on to maintain the infirmary compliant with patient privateness and safety ordinances.

She will besides necessitate a Corporate Project Manager to form and circulate information to the assorted off-site entities related to the installations that will necessitate to be on board with this alteration across the corporation. A Chief Medical Information Officer will be cardinal in supplying the position of the doctors and their peculiar demands and ends. and to be a affair for the staff physicians when the EHR rollout occurs. A Chief Information Officer will convey cognition about the hospital's twenty-four hours to twenty-four hours maps that will necessitate to incorporate into the new EHR along with how those systems presently function.

A Chief Nursing Information Officer will hold their finger on the pulsation of each nursing unit and be cognizant of the different user interface demands that will be needed by different sections for the the specific type of flow and care given. Last. a Chief Financial Officer will be able to steer the squad on subjects refering governmental support and current assets along with assisting to make and keep a budget as required with the acquisition of new package and hardware. he will besides be able to work with each department's budget shapers when the clip comes for apportioning preparation hours and equipment purchases. Along the manner the squad will necessitate to convey in sub-specialists to give information and feedback as they hone the new system. but for now the assembled squad will be responsible for researching. choosing and implementing the best EHR for their infirmary.

A. 2 a-e) Choose 2 real-life computerized direction systems and analyse them by comparing their advantages and disadvantages. urge the best pick to run into the ' MU' demands. depict how the characteristics of the recommended system meet the guidelines outlined in the three phases of meaningful usage. depict the impact on quality of patient attention. certification and results.

The squad is cognizant that presently they have a computerized system that they use for coverage and tracking labs. radiology and programming. but all certification is paper based. They consider the monetary value point involved with adding faculties to the bing McKesson package V buying and implementing an wholly new EHR called EPIC. EPIC appears to be user friendly and able to seamlessly connect all of the installations under the umbrella of their corporation. They make a list of some of the pros and cons associated with each system.

McKesson has the top of being a system they have already worked with and it has different plans that can be pieced together to run into some of the meaningful usage (MU) standard for conformity. They already have a working relationship with this seller and some experience with the merchandise. Once the treatment gets traveling. the squad realizes that there are many more bad points than good with McKesson. In their experience. the package faculties are connected in a bit-by-bit manner that makes it hard for plans to interface. Quite often data is merely lost and non retrievable. There are different informations entry systems for the different types of sections i. e. OR. ER. labour & A ; bringing. Med/Surge. radiology. and pharmaceutics. The different systems do non let for across the board

data harvest home and that makes it hard and clip devouring to track reportable nursing and CMS indexs. The aesthetics of McKesson are something that is often complained about by the staff. due to miss of typical colour passage and oculus weariness.

Last. the group is really loath to go on on constructing their EHR base with McKesson because the PCPs in the country will non be able to entree infirmary records. and office visit information will non be available to the infirmary based staff. Due to the demand for increased adult male hours in serving McKesson. deficiency of distinct informations sampling. and the hapless continuity of attention related to PCPs non holding entree to hospital informations and frailty versa. the squad decides to take Epic alternatively. Epic has the down side of being a system that will necessitate a big initial spending of financess. The infirmary will hold to buy package. and related hardware. They will hold to spread out the IT and biomedical technology sections to back up and keep the new system and equipment (something that would hold been necessary to a smaller grade with McKesson) .

They will hold to turn to some retrofitting demands related to wiring and computing machine instillment and in conclusion preparation will be a really large issue. Despite the possible down sides. the squad comes up with a long list of grounds that EPIC is the right system to take. To get down with EPIC is all one system. It allows for seamless interdepartmental interfacing. The PCPs in the country already utilize a version of EPIC and this will let for easy data exchange and a patient's information will follow them easy. The EPIC system has a medicine rapprochement signifier that is easy viewable to all attention givers and pharmaceuticss in the country. maintaining path of each

patients reported medicine dosage and frequence. EPIC has a ' my chart' characteristic that allows patients see labs. after visit sum-ups. and to interact with doctors about scheduling. medicines and lab consequences. EPIC has many built in safe guards. including watchword protection. uninterrupted backup and recovery plans so no information is lost. and the seller provides go oning support as needed. EPIC comes in 3 pre-bundled. customizable templets. each already set up to run into the Meaningful Use (MU) standard without holding to change the plan.

The squad can look at the three available options and find if one fits them absolutely. or happen the closest one and change it to suit their specific demands. Some illustrations of how EPIC will run into the Stage 1 MU standards are computerized physician order entry. look intoing for drug interactions and allergic reactions automatically. tracking demographics. maintaining current diagnosing. medicine and allergy lists. leting patients to hold electronic entree to dispatch sum-ups. and it gives patients electronic entree to doctors. Once the infirmary has used EPIC for at least two old ages. some illustrations of how EPIC will assist run into the Stage 2 MU standards are ongoing patient informations entry and discreet sampling for study coevals. The squad will go on to develop the package that demonstrates interoperability in sharing of lab consequences with other suppliers and systems. Security hazard appraisal will be on-going and built into the system.

Smokingposition will be tracked on all patients 13 and older and the EPIC package is designed to steer the installation from run intoing the Phase 1 standards to run intoing the Phase 2 standards. Phase 3 MU aims are projected to better results. The squad is waiting on the concluding opinion

for what the Phase 3 guidelines will be and in the average clip they have a jutting end of concentrating on primary bar steps and bettering overall population wellness. This will include recommended inoculation reminders. smoking surcease aid. healthy life style and repast planning recommendations. and annually medical examination reminders generated by primary doctors that will crossover to hospital patient charts. Some of the better benefits of EPIC include point and click check in the appraisal Fieldss. this allows for distinct sampling of information. EPIC utilizes a coverage work bench that will reap requested. reportable informations and assemble it into a user friendly templet. This will profit the infirmary by cut downing former man-hours required to happen and roll up informations for clinical quality steps. public wellness coverage. and CMS indexs.

Discrete informations trying from EPIC will do the infirmary a benefit to the community every bit good by leting it to track tendencies and supply information to community wellness nurses. EPIC comes with the ability to set up difficult Michigans and reminders that allow real-time users to be cognizant of demands for attention coordination and patient specific followups or recommended proving related to handling chronic conditions. It will besides let for symptom goaded order entry Fieldss to be instantly available in emergent state of affairss where clip taken to look for those things could intend a worse result. This is particularly of import when people present with symptoms of shot or bosom onslaught. Another EPIC benefit is the different degrees of bedside specific PHI protection related to sensitive attention. EPIC has a ' break the glass' functionality refering to all sexual assault and psychiatric admits.

This map merely allows relevant staff to open and see these patients charts. any others are shown a pop-up warning and a notice is sent to get down an probe of any other individual who logs in to theses charts. The squad is impressed with the information provided by EPIC refering scanning patients and medicines at the bedside and the decrease in medicine mistakes this causes. The scanners will incorporate with the medicine distributing machines already in usage at the infirmary. One of the major benefits of EPIC is the order entry physique. Eachdoctor. with a minimum sum of preparation. can custom-make the order entry procedure to reflect their demands. Medicine orders are immediately linked to a druggist to duplicate cheque for allergic reactions. and right dosing information. and so the medicine becomes available. via PYXIS machines on the unit for the RN to administrate at the bedside. The bedside dosing requires the patient and medicine to be scanned. further extinguishing possible mistakes. and provides a pop-up warning if an exigency override is required during any of these

stairss. While the squad acknowledges that developing and clip to go familiar with the new charting and bedside everyday alterations will ab initio impact patient attention in a negative manner. they have a program in head to maintain the patients educated on the new system alterations and the awaited better attention available to the patients across the board from establishing an EHR system. Having the patients ask inquiries and give existent clip feedback will assist the squad tweek their preparation and bedside modus operandis to give better. more organized attention that consequences in traceable results. This is merely an overview of some of the many maps EPIC has that persuaded the squad to take it as the new EHR

system for the infirmary. (EPIC and McKesson related information was culled from the writers ain experience with the systems and personal interviews with multiple members of the information sciences section at St Francis Hospital. Indianapolis campus) .

A. 3 a) Use of Quality Improvement Data

EPIC has point and click appraisal check and a standardised certification format that links related informations. This allows for distinct informations trying related to things like CMS indexs. The infirmary will be able to track conformity with things like ' door to EKG' times in the exigency section. Foley catheter usage and attendant CAUTIs. and the clip from when a patient presents with shot symptoms until a cat scan is done and/or whether the patient receives antithrombolytics as a consequence. The infirmary will besides be able to bring forth studies on mistakes that occur the via the Risk Monitor Pro incident tracking package. This will let them to go on researching and bettering procedures.

A. 3 B) Security Standards and Methods

EPIC has 24 hr monitoring of staff usage while logged in. and the records they entree. This is of import because 100s of staff members will be utilizing the system and at that place has to be answerability if employees were to look up their ain records. or the records of friends or household. This information can be tracked and the employee interviewed and disciplined if needed. EPIC besides comes equipped with incident coverage package called Risk Monitor Pro. All staff members are encouraged to utilize this format to describe any incident that might justify farther probe. It covers every

location. type of employee. type of equipment. patient. visitant or seller. Risk Monitor Pro signifiers are used to describe possible or sensed hurts. faulty equipment. lookout events and things that have the possible to do injury or harm.

This information can be followed up on by the hazard direction squad. so that procedure betterment is an on-going procedure. The squad works with members from the IT section and programs for primary informations storage with a redundant back up storage unit that at the same time updates so if the primary waiter fails there is no loss of information. They have besides planned for a 2nd. off site informations storage centre that can be used in instance of exigency to guarantee continuity of services. and maintain things up and running while the primary system is off line for ascents. Last back up tapes will be kept at a 3rd site in instance both of these countries are compromised. and the system can be rebooted and running once more within 72 hours.

A. 3 degree Celsius) Explain how the system will protect patient privateness and meet HIPAA demands EPIC will protect patient privateness in a figure of ways. End User entree is limited to merely being able to entree the information needed to make their occupations. Making the accessible information different for nurses. doctors. enrollment clerks. radiology technicians. commission members etc.

Forces will merely be granted entree once they have completed security preparation and have signed certification saying that they understand the legal hazards and duties when accessing protected wellness information

(PHI) . Persons outside the infirmary will hold entree to EPIC every bit good. for illustration nursing place doctors. They will hold a read merely entree granted. but will necessitate multiple patient identifiers to entree the information. Besides. as mentioned earlier. EPIC will use security related chart difficult Michigans like ' Break the Glass' .

A. 3 vitamin D) Explain how the recommended system meets HIPAA demands EPIC helps to run into HIPAA demands with machine-controlled enforcing of entree policies. and pro-active alertness that links straight to the hazard direction section. necessitating strong watchword policies. and automatic logout at terminal user work Stationss. EPIC allows suppliers to protect the unity of informations and retrieve original informations in the instance of it being altered or damaged. EPIC users are required to hold appropriate preparation to be able to entree the system. and can be locked out in the instance of expiration. Portable devices carry encoding package that does non let for 3rd party informations extraction or entree. EPIC can besides rapidly bring forth studies with distinct trying related to assorted signifiers of entree. The bulk of conformity will be the duty of the staff with written policies. documented countenance plans and probe that is ongoing. consistent and documented.

A. 3 vitamin E) Describe how following the system will cut down costs to the organisation Establishing this new system will ab initio bring forth more costs. but in the long tally will salvage the infirmarymoneyin many ways. Meeting the ARRA/HITECH Act demands will assist to countervail those cost with fiscal inducements and avoiding mulcts and punishments. Having readily available trial consequences will diminish the costs and labour

associated with reiterating lost or illegible consequences. With superior organisation and informations drumhead tools. the cost for labour associated with analyzing charts separately and bring forthing studies will be exponentially lower.

The demand for transcriptionists will be greatly reduced by using command package. Facilities for storage of paper charting cost money for upkeep and staffing. An electronic database should do charge and insurance claims easier to treat and thereby generate gross faster. The clip it takes for doctors to pass traveling over complicated medical histories with patients is greatly reduced by holding that information readily available in a database. " According to a recent survey. when infirmaries rely on advanced electronic wellness records they can salvage up to 10 per centum per patient admission" (" Advanced EHR Cuts Hospital Costss By 10 % Per Admission. " 2014) .

4. A) Explain why active nursing engagement in the planning. choice. and execution of the systems is of import to the success of the execution procedure and meeting meaningful usage demands

Active nursing engagement is of import to the success of implementing any procedure that affects care given at the bedside. For the system to be optimized for usage. nursing suggestions and feedback are critical. EPIC knows this and has a squad of nurses on staff to work with the installation in developing end-user interface. ' Nurses' from the infirmary include the advocators. CNS's. NP's. LPN's. directors. and bedside attention givers. each with a specific focal point and experiences that are valuable when assisting

to make up one's mind how charting should work. Any thing that pulls a nurses attending off from the patient. or is deflecting or hard to work with lessenings the sensed degree of attention and increases the potency for mistakes.

The wellness attention ends of meaningful usage include bettering efficiency. safety and quality while diminishing disagreements. affecting patients and their households in their attention. bettering public wellness results. bettering attention coordination. and progressing security and privateness of PHI (Gregory & A ; Klepfer. 2010) . All of these things are the foundation of every interaction a nurse has with a patient. This is why nursing is one of the most sure professions. harmonizing to the Gallup pole web site. nurses come out on top at 80 % when people were asked to rate " the honestness and ethical criterions of people" in different given Fieldss (" Honesty/Ethics in Professions | Gallup Historical Trends. " n. d.) .

Because standard nursing attention already meets the ends outlined for meaningful usage. the most of import thing the mean nurse can make is to work hard to be competent using the selected EHR package. Advanced users and nurse leaders are of import to assist steer the EHR choice procedure in the way that will better the bedside interactions and user interface. Clinical nurse specializers have advanced instructions and convey the nursing doctrine to the choice and execution procedure. All of these functions are critical to the success of any EHR execution.