EHR Implementation Plan for Fairfax Clinic

Team D Management and Consulting Group: Hira Ahmad, Sannah Hussain, Maria Suri, Ahlam Mohamed, Akosua Odoi-Larbi, Sameera Ofaq Gul, Fareena Qureshi

George Mason University

HAP 460

October 10, 2021

Introduction

We are part of the Team D Management and Consulting Group, and we are here to provide information and explain how our Electronic Health Record (EHR) system will provide your clinic benefits related to operations, staffing efficiency, cost reduction and many other areas. Before we get into that, we want to talk a little about ourselves and who we are. We are a consulting firm made up of highly skilled and experienced professionals with over 20 years of health systems management and health policy knowledge. We will explain how our EHR systems will meet your clinic's needs and compatibility requirements. Our main goal is to bring an EHR system that is not only beneficial for your providers but for your patients and their health as well. Our team has worked with several other prestigious healthcare companies providing a state of the art system with minimal clinical errors, cost effective measure and a user-friendly interface.

Today, we are going to address some concerns and issues about your current system and how we can solve them. We will go into details about how effective our system can be, what it has to offer, and how it can minimize clinical errors. Our system has a unique dashboard that is customizable by adding templates based on the preference of each provider. Security is one of the main concerns when it comes to creating an EHR system and we can assure you that we have high level security measures in place with a 2-factor authentication feature that protects all patient information under the HIPAA Law. We also offer EHR training for your staff and tech support for any questions or concerns that may come up. Another important feature is the patient portal that allows for a better patient experience. We'll also go into detail about how we plan to implement this system and the cost breakdown. We appreciate you taking out the time today, now we will go more into depth about the system.

Objectives and Design

Moving forward, our main objective is to implement an EHR system which is easy to navigate for both patients and providers. With that said, our team strives to give a continuing improvement on the quality of care, reduce medical errors, provide an effective means of communications, and collect health information for educational/research purposes, to say the least. As stated, our team will do its best to find vendors which fulfill both patient and provider needs. We will hold meetings as necessary to discuss possible solutions to problems that may arise and conduct surveys for patients to ensure we are providing efficient service.

An EHR system is intended to accomplish a smooth cycle for both the patients and providers, bringing about quality, security and proficient medical care administration. Our group will follow a cycle known as S.M.A.R.T. objectives. Specific - where accomplishing our objectives would significantly impact our patients and our training. Measurable – We can measure the current level of work and meet our goals. Attainable – Although the objective might be a stretch, we can accomplish it. Relevance - objectives should compare to assets accessible and time. Time – Meet deadlines to achieve goals which in our case is 6-9 months (The office of the national coordinator for health IT, 2016). These S.M.A.R.T. objectives are the guidelines for our EHR implementation project, and achieving these goals will motivate providers and practice staff to make necessary changes and attain new skills.

The question to ask is, how will our EHR improve your patient care? Well, we make sure providers understand which medication patients are taking along with any current treatment plans by flagging any potential drug interactions, dosage changes, allergies to a drug, or adverse reactions to a drug. On the other hand, patients will have access to patient portals or mobile health apps to keep track of records from the comfort of their home.

We all know medical errors are a third leading cause of death in the US, and implementing an EHR helps reduce dosage errors, drug-interactions, or when a patient is seen by many physicians. Features we will be able to install would be to have alerts and reminders to improve patient safety. Regarding safety measures, our team will continue to follow HIPAA and HITECH laws to be compliant when implementing EHRs, as these are important when building any software for your practice. To prevent security breaches, we will have security features which will later be discussed in the proposal.

Furthermore, design is how an EHR system will work. We will discuss that part in the next section, but I would like to add that the purpose of this design is to simply improve health for all.

State the Problem

Electronic health records cover the digital version of a patient's paper chart. These records are stored in real-time and make information available instantly and securely to authorized users. While an electronic health record contains the medical and treatment histories of patients, the system is built to go beyond standard clinical data collected in a provider's office and can be inclusive of a broader view of a patient's standard care. EHRs can also be explained as an electronic collection of a patient's medical history including diagnosis, medications, treatment plans, allergies, laboratory and test results (EHR Benefits,2016). It is therefore a vital part of healthcare. The electronic health record system however has some concerns that pose as a factor and stands in the way of some hospitals acquiring these systems. They include the high costs, the data privacy and security concerns, the risk of medical liabilities, employee resistance and the fear of poorly designed systems that would not integrate with other systems.

The installation and maintenance of an electronic health record system is very costly to install and expensive to maintain. In a 2002 study conducted in a 280-bed acute care hospital, the projected total cost for a seven year (7) long electronic health record installation project was approximately US \$19 million. In the outpatient setting, it is estimated an average initial cost of US\$ 50,000 – US\$ 70,000 per physician for a three-physician office (Collum T.H et al, 2011). These expenses and costs can be used to purchase more needed medication or reduce some of the costs incurred by the hospitals. However, what our team of experts would do to alleviate these worries is to prove with cost – benefit analysis and ROI's that your decision to invest in EHRs is reasonable and would be worth it and most importantly would be implemented excellently by our company.

Another disadvantage of the electronic health record system is that they can be hacked, and patient's confidential records can be accessed. The electronic health records software presents a target to hackers or is very much at risk of being hacked. For us as a company, we hold the security of patients' data a top priority and would ensure HIPAA and HITECH compliance. We are also aware that in 1996, Congress enacted the Health Insurance Portability and Accountability Act (HIPAA), which requires an organization to use these electronic health records to safeguard patient's information from computer criminals bent on breaking into the system. There is always the possibility of these records being hijacked by a criminal, who may hold the patient data hostage or encrypted until a ransom fee, which is usually very expensive is paid to unlock the information (Rosario,2018) but our firm would adopt all security measures necessary for keeping unauthorized personnel from having access to patient's records.

A third concern about the adoption of EHRs is the fear of poorly designed systems that do not work with the hospital's daily operations. Electronic health records should be designed to

streamline the workflow of the healthcare giver. Unfortunately, this is not always the case, hence, messing up the hospital's workflow and making daily operations a little more tedious. What happens most times is that these systems are created by developers with little regard or knowledge to how it is to be used in the real medical world situation, making the interface clunky and difficult to deal with. This means that precious time needed to be spent on giving patients quality care, will be spent on entering basic information or retrieving patient records. This results in unnecessary time wasting which can have an impact on the patient's health. Our firm will aim at selecting the best EHR for your hospital and would make sure it is customized to fit your needs and would support a steady workflow.

Another issue of electronic health records implementation has to do with concerns about malpractice liability. Several potential liability issues can be associated with electronic health records.e.g. In a case where medical data gets lost or destroyed during the migration from paper-based to electronic based records, it can lead to treatment errors. Since healthcare practitioners have greater access to medical care via electronic health records, they can be sued or held responsible if it leads to loss of life or a disability (Rosario, 2018).

Finally, the issue of most medical and clinical providers hesitating in using or adopting an EHR system. Most medical providers worry that new technologies might be too cumbersome and difficult to operate and that they would create inconsistencies and waste time, thus, reducing the quality of care. Our firm is aware that not everybody in the medical profession is well versed in technology and that changes might spark anxiety. What we would do as a company, if selected, is to factor in the need for adequate training and technical support and will aim at choosing a system that would be highly user-friendly. In all, the use of the electronic health records systems has become an integral part in healthcare with benefits for patient wellbeing. It is our team's

belief that if some of these uncertainties or concerns are solved by knowledgeable persons such as ourselves, it will provide immense benefits for most healthcare facilities and patients.

Proposed Solutions

Regarding your clinic's current goal, to find and put into effect an appropriate EHR system, we have several techniques to make the research and implementation process easier for all parties involved. The first activity in our work breakdown structure will be to hold a preliminary meeting, or a walk-through, with the managers of your clinic. The second activity will be to assess the size of your clinic, the number of staff, and your budget range. Next, we will use the information gathered to create a scope statement and budget plan that will be personalized to address your needs. Our staff will then go out and research different EHR systems based off of the information that has been gathered. We will narrow down our list of possible vendors until we reach a finalist. We will handle discussions with vendors and will relay information or seek advice from you as needed. Once we have chosen an EHR system, our team will create a schedule and implementation plan to bring your clinic's vision to life. Once everything has been finalized between your clinic and the selected EHR vendor, we will validate the scope and begin installing both the hardware and software into your practice. Our team members will oversee the installation process to ensure everything goes smoothly.

Historically, we have had a lot of success in past projects involving EHR implementations. We will provide a list of client testimonials from these projects so you can see our work from other perspectives. We have found that "try before you buy" EHR systems suit our clients best, especially small practices who are thinking of going live for the first time. If this interests you, our team can compose a list of vendors who offer free demonstrations or trials so

that your staff can try out the system and see if they like it. With this solution, there is no need to be afraid of the unknown as you will get the opportunity to sample different systems at no cost.

Oftentimes, we have seen clinicians who were afraid of EHRs and the thought of staying behind a screen all day. This is a valid concern that we're more than happy to address. After conducting research, we have found that there is a connection between EHR usability and clinician burnout. EHR usability problems typically result in an increase in cognitive load and errors, which can put patient safety at risk. An increase in cognitive load adds to EHR use, which in turn leads to clinician burnout (Jason, 2021). The last thing we want is for your clinicians to feel overwhelmed and as a result impact patient safety. Both your clinicians and patients are our stakeholders which is why we have some solutions to this problem. Our team will conduct field research to identify EHR systems with intuitive data entry features in order to limit screen time. At your request, we could also hire a scribe or use voice recognition software to ease administrative tasks. The comfort and satisfaction of your clinicians and patients is one of our top priorities.

Although modern technology has revolutionized the way in which health care is provided, security issues and data breaches remain a top concern for many care providers nationwide. Our team will make sure to conduct in-depth research about each EHR system we present in order to make sure the EHR system you ultimately choose will have secure features. We will make sure each EHR system is HIPAA and HITECH compliant, has data encryption software, is password protected, and is ONC-ATCB certified. Research has found that many patients refrain from sharing their health information because of the fear of it being misused or hacked (Dugar, n.d.). Helping you choose the most secure EHR system for your clinic is our

responsibility and it will not only benefit you as a healthcare provider, but also your patients who shouldn't have to live in fear of their information getting into the wrong hands.

Reasoning for Solutions

The first step in our work breakdown structure will be a preliminary meeting with the managers of your clinic, also known as a walk-through. Meetings allow our team members to contribute their ideas while also informing them of our expectations, objectives, and desires. Our team believes that it is critical to ensure that the meetings we hold are productive, and we will do so by starting and ending meetings on time, scheduling meetings for less than an hour, and only holding meetings for essential purposes; all other communication will be done via email. We'll make sure to do a check-in at the end of the meeting so that everyone is on the same page.

We'll design a scope statement and budget plan that's tailored to your needs after we examine the size of your clinic, the number of employees, and your budget range. The scope statement ensures that all parties involved have a shared and clear knowledge of the project and helps to prevent scope creep. Our team can limit the likelihood of misunderstandings later on, which could derail the project, by setting the proper expectations with stakeholders. Budgeting is critical to the success of any big company venture. Projects might break apart and be left unfinished without a well-planned budget. Those in charge of purchasing can use a budget to establish what percentage of the available funds can be assigned to the project's constituent elements. This gives you the chance to see if the project can be done within your budget. If the budget reveals that money is insufficient to pay all of the project's needs, having a budget in place will make it easier to prepare for future expenses.

By experimenting with various EHR software, you can determine which EHR software works best with your system and staff. Based on the information gathered, our experts will go

out and investigate various EHR systems. To ensure the safety and effectiveness of electronic health records (EHRs), they must be tested regularly. An effective testing procedure requires safe testing in the production environment using test patients. After a system is live, ongoing regression testing should also be conducted to ensure that the system continues functioning as expected, that changes made have not created new issues, and that new problems are identified and addressed (Wright, Aaron, & Sittig, 2017). The overall goal is to ensure that software is created and built according to specifications.

Our team will develop a schedule and execution strategy to bring your clinic's vision to life, taking into account the project's timing, resources, and realities. Schedules and budgets are inextricably linked, and a rise in one will almost certainly increase the other. The timetable establishes when work tasks must be done, milestones must be met, and the project must be completed. The budget establishes the cost of each workpiece, the cost of each level of the work breakdown schedule, and the overall project cost. To determine how well the project is moving or completed, actual performance can be compared to these plans. The project schedule is intended to inform all stakeholders on when specific workpieces and project activities should be completed. The project schedule also serves as a link between project aspects and the resources required to complete them.

Budget

There are several individual items that will be discussed when accounting for the budget of the EHR implementation in your practice. The overall annual implementation costs for a clinic your size that we have done in the past have been around \$162,000, but we can discuss the specifics of your clinic's budget needs after our initial meeting. This cost is typically broken down into system costs, hardware costs, induced costs, and EHR software costs; however, after

our initial meeting, we will discuss your needs and concerns with you and make an evaluation. System maintenance costs can normally run around \$85,000 for a clinic of your size, and these costs are there to ensure that the EHR system is running smoothly and will continue throughout the following five years that we plan to work with you. The overall hardware is made up of the computer systems and tablets, which will be used to access the EHR system within the clinic. Costs for these items vary depending on the needs of your office clinicians as well as the overall Wi-Fi setup, which we can also discuss any upgrade needs as we further progress. The overall induced costs include end user training that teaches the staff how to use the EHR system, network implementation training, ongoing training to ensure that the staff understand how to use the EHR system, and preparing the practice for the space needed for the EHR. The overall EHR software consists of annual upgrades for the EHR software, vendor costs, and the cost for installing the EHR system. If you decide to choose us, these costs will be yearly, however we are giving you a relatively low cost for the EHR implementation due to the size of your clinic along with the 10% discount.

Schedule

We expect the implementation of an EHR system to take about six to nine months due to the clinic's small size of 10 clinicians. The time frame of the EHR implementation is made to be about this length in order to efficiently implement the overall EHR system while allowing it to also be integrated into the daily workflow throughout the following months of the implementation process. Initially, we will hold a preliminary meeting to assess the type of system that your clinic needs. Once this is established, we will be testing out different EHR systems that multiple vendors provided to us in order to determine which is the best fit for your clinic. The EHR system that is chosen will be vetted to confirm that it is HIPAA/HITECH compliant and to

assess the security of each system provided. Any old data that is in your system will be migrated into the new one with the possibility of hiring a scribe to allow for a more efficient transition. A solid workflow will also be established to ensure that the implementation process runs smoothly. Prior to launching the EHR system, training for the staff will be provided to ensure that they have a good understanding on how to navigate the system. We also plan on taking a slower approach when launching the HR system and implement it incrementally. This means that we will be introducing EHR functions one at a time, such as virtually prescribing medicine, and if there are any issues present, it'll be easier to manage rather than rolling everything out at once. This allows for the staff to be fully prepared when the EHR system is completely implemented into the clinic.

Implementation Plan

In order to properly implement our plan, it is important to understand how things will be done. The objective is to help a clinic choose the right EHR system for their facility. Our firm will aid in educating the clinical staff about the advantages and disadvantages of various EHR systems. It is important to have an EHR system that is effective, efficient and is user friendly in order to have a well working facility. With the help of all clinical staff members and our team, we will be able to successfully integrate the perfect EHR system with your facility.

Our goal is to provide your practice with an EHR system that will help serve your patients in a more effective and managed way. Once your chosen EHR has been successfully implemented and learnt by the entire staff, your clinic will be able to successfully have patient information available safe and securely to any authorized user. This will allow not only your facility, but any other facility with access to add updated patient information which will potentially improve patient care. If chosen, your clinic will also be able to allow patients to

access their medical data and forms that they will be able to submit beforehand at their convenience.

As with all projects, we anticipate there will be some difficulties that we may face in this process. The issues we may encounter include, having ineffective meetings, having members that are not fully aware of the purpose of our project, difficulty for clinical staff in learning the new EHR system, higher cost than anticipated, and difficulty in ensuring the safety and effectiveness of the EHR system.

To make certain of a successful implementation of the EHR system and overcome the difficulties we may face, we already have a plan on how we will implement the solutions to the issues discussed. We will ensure meetings will be productive by emailing meeting plans and discussion topics in advance to be reviewed by all meeting attendees. The email will also clearly state the purpose of the meeting and post-meeting emails will also be sent which will include all proposed solutions to the problems discussed and will be reviewed by all team members that will be directly involved with the specific tasks.

To prevent any member from not knowing what is going with the project, we will develop a scope statement. The scope statement will acknowledge our goal, which is to implement an EHR system, it will clarify the purpose of an EHr system and any specific features that are required, we will also produce a detailed breakdown of tasks, establish what the major deliverables will be, and devise a realistic timeline of when tasks will be completed by comparing this project with a previous one to prevent planning fallacy.

In order to develop a realistic and precise budget, we will categorize the various costs and provide a breakdown of all costs under each category. Our estimates will be based on previous similar projects so we can prevent being over budget.

We will also assure your team the safety and effectiveness of the EHR system by doing continuous testing of the system and identify any flaws and how we can address them. We will also well educate all users on how to effectively and efficiently navigate the system.

As we begin our project, to make sure everyone is on the same page, we will develop a schedule and execution strategy by breaking down tasks and providing deadlines. To guarantee a smooth execution, we will make certain all members from our team and your facility continually communicate with each other.

To support our project, our management team will include our project manager and c-level sponsor. For our technical team, we will have an application analyst to analyze the selected EHR system, an application developer to help develop the EHR system, an application test engineer who will test the system to prevent any flaws, and a consultant who will communicate the needs of your facility to the technical team. The physicians, nurses, administrative team, billing department, and all other staff of the clinic will be part of the user group representatives.

Conclusion

To conclude our proposal today, you can see that our team is dedicated to working with your clinic to find the best EHR system. To reiterate our goals, we aim to provide a high quality EHR system that will reduce medical errors and clinician burnout as well as working with your clinic's budget. Our team will also ensure high level security with compliance to HIPAA and HITECH. Aside from your clinic providing us your budget, our "try before you buy" feature will be the first step as your clinic will have the opportunity to demo a sample EHR system and choose which you think will be a better fit. With engagement of your needs, feedback, and clear

communication we believe we can secure an EHR system that best fits the functionality and needs of your clinic. If there are any questions for our team please feel free to let us know so we can deliver an EHR system to your liking.

References

- Dugar, D. (n.d.). *Electronic health record security: Alleviate EHR security concerns*. SelectHub . Retrieved October 3, 2021, from
 - https://www.selecthub.com/medical-software/ehr/ehr-security/#:~:text=The%20biggest%20benefit%20of%20adopting%20an%20EHR%20for,EHR%20security%20features%20are%3A%20HIPAA%20and%20HITECH%20Compliance.
- EHR Benefits. (2016). Business Insider. https://www.businessinsider.com
- Jason, C. (2021, January 12). *Increased EHR workload has a major impact on clinician burnout*. EHRIntelligence. Retrieved October 3, 2021, from https://ehrintelligence.com/news/increased-ehr-workload-has-a-major-impact-on-clinician-burnout#:~:text=There%20is%20a%20growing%20connection%20between%20EHR%20usability,EHR%20use%2C%20which%20then%20leads%20to%20clinician%20burnout.
- Menachemi N., Collum T.H. 2011. Benefits and drawbacks of electronic health record systems. Risk Manag. Healthc. Policy 4, 47 55.
- Monica, K. (2020, February 7). *How to design a comprehensive EHR usability assessment*. EHRIntelligence. Retrieved October 6, 2021, from https://ehrintelligence.com/features/how-to-design-a-comprehensive-ehr-usability-assessment.
- Rosario, C. (2018). *4 Problems With Electronic Health Records*. Adsc.Com. https://www.adsc.com/blog/problems-with-electronic-health-records
- The office of the national coordinator for health IT. (2016, October). *Defining goals and objectives*. Retrieved from https://www.healthit.gov/sites/default/files/playbook/pdf/defining-goals-and-objectives-for-ehr-implementation.pdf
- Wright, A., Aaron, S., & Sittig, D. F. (2017, January). Testing electronic health records in the "production" environment: an essential step in the journey to a safe and effective health care system. *Journal of the American Medical Information Association*, 24(1), 188-192.