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ELI 9200 Project HUGO

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Question 1

See the attachment in the end of file.

Question 2

– Application of Agile in Project HUGO

Agile helps the team to come up with value to their client more quickly and with fewer procedures by using an iterative approach to project management. Each iteration contains 2~4 weeks sprints, with a purpose of completing the most crucial features first and producing a potentially marketable product by the end of each sprint. What is Agile Scrum Methodology? Learn the Methods & Tools (inflectra.com)Professor Vara Maurer intends to start an entirely electronic patient record project. He will have the following task sequences: The time and materials needed for each task vary.

The hospital health care system workflow for Project Hugo application was complex, which led to both efficiency and room for error. The Agile scrum methodology is able to be used on the HUGO project. Scrum prioritizes helping communication with clients, their feedback and recommendation over documentation and forecasting, and it's scrum meetings bring together cross Susan Johnson's department with a facilitator. What Is Agile Scrum Methodology? - businessnewsdaily.com clinical department (nurses, physicians, pharmacists) in medical administration, and pharmacists are all involved in the Hugo Case project. The team will reorganize for the upcoming sprint after providing an update on the status of their previous task sprint. Agile EMAR system's practical permissions through flexible permissions system to a all role assignments in the

corresponding permissions, the users by their own role will be able to enter the corresponding module, permissions given to the operations, to ensure that different operating requirements of different users at all levels, and can ensure the low-level user hair see high level without the user's data. What is Agile Scrum Methodology? Learn the Methods & Tools (inflectra.com) The team assigns or adopts scope from the backlog of unfinished features, tasks, and issues and members of the team commit to what they will complete over the course of the next few days during the current or upcoming sprint.

This method is always blissfully quick is one of the advantages. It is simpler to focus that the project will be subdivided into a compressed sprint from an uncomfortable huge perspective. The requirement for the facilitator is that they refrain from participating. This results in an impartial referee who can keep the project moving. Even those who are making commitments are only doing so for a limited number of things over the coming few days. How to Implement an Electronic Health Records System - businessnewsdaily.com Even on the first day of the sprint, the end goal is always in sight, which keeps the project's velocity at an extremely high level. The concept of structured data entry introduces simple elements and complex elements, and simple elements can be further divided into radio class elements, multiple-choice class elements, edit box class elements, and so on. To choose the class element, we can set the read-only property, will choose properties, and so forth. To edit the box, the LHSC pharmacy read properties and have the effect of using standard medical language words, which will enhance the quality of medical records, by setting the read-only property, not only required attribute but also its numerical range, for the same is the and elements, regulatory department can

also set its capacity through a simple mouse click. How to Implement an Electronic Health Records System - businessnewsdaily.com

However, this method has the drawback of not being adaptable to changes in customer requirements. Agile scrum methodology is an incremental development-based approach to project management. MBA Agile Management : Project HUGO at LHSC: Leading Urgent Change in Healthcare Solution (embapro.com) It has the flexibility to adapt the requirements from feedback from the customer and end-users as evidenced by the fact that patients received a barcoded patient identification band when they were admitted to the hospital and when a nurse or a therapist administered a medic. As the requirements consisting of features, user stories, and other backlog items are purposefully kept high-level at the start, with the ability to redefine and replan after each release and sprint, it has the flexibility to consider new requirements as they The Project Hugo multidisciplinary team is able to develop a roadmap using the Critical Path Methodology, divide difficult issues into manageable tasks, and allocate resources to the most pressing opportunities. The sequence that requires the most time would be described by the CPM. When applied to this situation, building the electric system and data enrollment and credentialing take more time. It is a great idea to address the weaknesses of agile scrum in this situation by applying a hybrid case of agile scrum methodology to critical path methodology.

Question 3

Although Project HUGO is not a typical bio-medical project management example, some management strategies can still be applied. To help Susan find a solution to implement

CPOE successfully, the first step must be clarifying the stakeholders involved in this project. From my perspective, these stakeholders are the clinical department (nurses, physicians, pharmacists), IT department (Susan and her staff), financial department, regulatory department, the director of the hospital, and most importantly, patients. In Project HUGO, patients are primary stakeholders who stay in the inner circle of the stakeholder structure. Every decision made or product selected should benefit patients in the first place. Since the primary stakeholder is the same in the bio-medical industry (BMI), BMI standard practice is an option to ensure the successful implementation of Project HUGO.

LHSC pharmacy is not only Susan Johnson's department, but the core department in the hospital. It is in charge of taking the medical order from the physicians and dispensing the right type and dosage of drugs to nurses. According to the errors in the key stage in the process of medical use, ordering errors, transcription errors, and administration errors result in 39%, 12%, and 38% of all serious medication errors respectively. Among which, dispensing errors occupy the least portion which is 11%. Unsurprisingly, Susan's pharmacy staff does not stand for Project HUGO, because most of the significant errors do not happen in their department. Refusing to step out of the comfort zone is understandable, but not responsible for patients. 11% of errors seem like a small amount for pharmacists, once it happens, it turns into nearly 100% death for patients! In the first 6 months, with the patient-specified barcode implementation and scanning, the dispensing error can be reduced up to 67% which is 3.63%. In addition, the handwritten medication order is quite unreadable. It is undoubtful that pharmacists suffer from these illegible orders for a long time, especially for those volunteers. If I were them, I would

advocate for Project HUGO. Implementing the CPOE in LHSC is like combining two types of projects in BMI together: IT system improvements and Efficiency improvements. To successfully deliver Project HUGO requires a lot of time, not only in training but also in convincing hospital staff to turn over their minds.

The regulatory department is another area in which bio-medical standard practices (Six Sigma initiatives) can apply. The regulatory department can collaborate with Susan Johnson's department to define the scope of Project HUGO, count how many staff are against Project HUGO, communicate with opposers, analyze and categorize the reasons behind their opposition, then set the policy flexible and expand the regulation in portion to the implementation of CPOE. For example, at the beginning of implementation, some mistakes are tolerable to a certain extent to help clinical staff adapt to CPOE more easily. The regulations expand to all departments which are stakeholders while the implementation is going on. When all staff gets used to CPOE, a stricter policy is helpful to let staff avoid errors. The auto-generated incident report which is mentioned in the Project HUGO is a great regulatory example to let nurses truly understand the importance of deadlines.

Question 4

1. Robert's Rules provides for constructive and democratic meetings, to help, not hinder, the business of the assembly. It is clear that the HUGO project is a project that can improve the efficiency of hospitals, clinics and emergency departments. From our point of view, this project will bring great benefits to the medical industry. But as Johnson said, many doctors, nurses and other staff were not supportive of the project.

I think Johns can propose Robert's Rules to them, which he can use to convince those who disagree. Robert's Rules emphasize a rule that "in fairness, the minority should obey the majority". A reform makes sense if the majority of people in your industry approve of it. If Johnson can explain Robert's Rules clearly, then she doesn't need to try to convince everyone, she just needs to convince more than 50% of the people that the HUGO project will bring convenience to the medical industry, so that the HUGO project can be successfully implemented. Of course, the premise of using this rule is that the industry recognizes the rationality of the rule. I think the medical industry is a serious industry, and most of the practitioners in this industry are highly educated, so if you can explain to them Robert's Rules, then they will accept it.

2. It should be noted that the HUGO project is led by Johnson's team, but this project not only includes her team members, but those hospital staff are also important participants in the project. When trying to implement the HUGO project, Johnson inevitably ran into conflict with others, especially those who disagreed with the project. Even those who agreed with the HUGO project could potentially clash with Johnson over the course of the project. So, I think Johnson needs to do conflict management. We have learned the concept of this part in the course. To do a good job in conflict management, she must first realize the essence of conflict. It is a process that begins when you perceive that someone has frustrated or is about to frustrate a major concern of yours, it can change, sometimes the reasons behind it may not matter. Conflict is perceptual in nature, so for Johnson, how to formulate a more complete project plan is very important, but what’s more important is how to deal with the

relationship between her (or her team) and medical institutions. Finding the key reason for the conflict requires her to investigate the background of each hospital, to understand why some doctors or other staff have different opinions, is it related to their experience? Is it because of some previous accident at the hospital? These investigations could be of great help to Johnson.

3. As I read this material, I noticed that some nurses are opponents of the HUGO project. The reason for their opposition is not that there are some loopholes or mistakes in the project itself, but that they think their work is done so well that they do not need technical upgrades. Some of them claim “cared for patients for many years using pen and paper” and “the mistakes never happened to them because they had perfected the manual process”. This brings me to the Interpersonal Conflict, which may be due to different work ethics, different behavioral styles, egos, personalities that do not mesh easily. These nurses may simply be accustomed to their inherent work patterns and are afraid to change. Johnson should convince them to open their minds to new things. On the other hand, for some nurses who may be worried that new technology will take their place and cause them to lose their jobs, Johnson should make it clear to them that the HUGO project will not cost them their salary. Johnson should have shown them that the implementation of barcode medication administration reduced more than 700 medication errors in one hospital within 6 months. These mistakes were unnoticed by humans, and sometimes people make mistakes for various reasons that machines don't.

4. Since conflicts are inevitable, Johnson should find a way to solve them. The Traditionalist view of conflict is to view it as having a negative effect on organizations and the emphasis of traditionalists is conflict suppression and elimination. There is no doubt that Johnson should try to be an Interactionist instead of being a Traditionalist. In fact, I think conflicts can have a good side in this case. As described in the material, the HUGO project involves multiple medical institutions, unlike traditional projects that are only carried out within a certain company or organization. A project in the medical industry is long-term, it's not like 'Ok we have done the system update and that's all'. The HUGO project while upgrading the hospital system also requires simultaneous training for many doctors, nurses, and staff, such as how to use CPOE, CLMP and eMAR. By understanding these conflicts, a lot of information can be obtained about the learning ability, ideology, and education level of these participants, which is very helpful for follow-up work. Johnson should try to collect different conflicts, encourage nurses and doctors to voice their concerns, and use these conflicts as a basis for improving the project. Solutions for different conflicts should be clearly explained to HUGO participants to allay their concerns. It's better to have a conflict early than late. No one likes to make adjustments after the project is complete. That's too expensive.

5. Johnson can use some main problem-solving techniques published by PMBOK to deal with these conflicts. Confronting - as I said before, don’t avoid or ignore conflicts, no matter how hard or complex they are, collect these conflicts and record them. This should be the first step, only after she faces the conflicts, she can find ways to solve them. Compromising - Johnson should take a step back for some people, the material

mentioned that there is a wide age range of doctors and nurses, some of them may be too old to accept new technology, which is understandable, for these people, Johnson could consider excluding them from HUGO. Postponing a decision - The HUGO project has a deadline but considering the particularity of this project (involving multiple medical institutions and human life), the deadline should be flexible. Smoothing - Johnson should make everyone, both those who agree and those who disagree, aware that HUGO's purpose is to better care for patients, to advance the medical profession. Based on this consensus, the communication efficiency will be higher. Forcing - For those who have the ability to adapt to new technologies, such as CPOE, CLMP, etc., based on Robert's Rules, they may need to be forced to accept the HUGO project. When an industry as a whole is improving, those who are unwilling to accept must also adapt. Every reform will have opponents, but that is not a reason for us to give up. When you have the ability to accept new technology, have the ability to adapt to new training, and most people agree with the project, you need to keep up and you have to.

Question 5

Identify Risk	Severity	Likelihood	Detectability	RPN#	Main driver
1.Motivation for implementatio	9	8	7	504	A

n					
2.Underestimated costs	9	9	5	405	B
3.Lack of visible leadership support	7	7	3	147	C
4.Lack of clarity in CPOE vision	8	7	3	168	D
5.Value to users not apparent	7	9	3	189	E
6.Project management methodology is not tight	7	8	5	280	F
7.Workflow and processes are not	6	7	6	252	G

accurately					
8.Technology	6	5	7	210	H
9.Training and support removed too soon	6	5	7	210	I
10.No optimization process	5	3	8	120	J

A. The motivation for implementation will be the top 1 risk for this project, because motivation will decide whether or not this project should be started. As a result, the severity of this project will be 9, and from the document of this HUGO, the likelihood of this risk is very high, so it will be 8. This risk is not able to detect a design problem so the Detectability will be 7.

B. When the project has started, the following biggest problem will be the costs for the project. If the costs of the project are calculated inaccurately, then the whole project will be at high risk. So, the severity will be 9 as well. For this type of project, the finance problem is very difficult to predict or plan, so the underestimated costs will be very likely to happen, so the likelihood is set to 9 too. And the Detectability is set to 5 because there might be some problem regarding the costs.

C. Leadership is very important for this project, this HUGO is a very big project, a great leadership will be a positive factor for this project. As a result, the severity for this risk is set to 7. Great leadership is very difficult to discover, especially for this kind of HUGO. So, the likelihood for this risk will also be high which is set to 7. For the detectability, there is a high chance that a potential problem will happen in the process because during the whole project, too much uncertainty will occur.

D. The lack of clarity in CPOE vision will be the fourth risk. The computerized provider order entry is about the process of providers entering and sending the treatment instruction. If anything ambiguous during the process, then some error will occur which will cause serious problems. So, the severity of this risk will be 8 and when the project is processed, the version of the CPOE will not be able to be designed to be perfectly at the first place, so the likelihood of this risk will also be high, which will be 7. And it can be predicted that there will definitely be some design problem, so the detectability is 3.

E. The CPOE is not very suit to the clinicians, those clinicians will prefer to using paper because it will help them find the related documents very quickly, in other words, clinicians are used to using clerical work, so the severity of this risk is set to 7 and from the research data, majority clinicians tend to use paper, so the likelihood of this risk is 9. and the detectability of this risk will be set to 3 because when those clinicians try to get used to the CPOE, there will be some problems at the beginning.

F. In order to make the whole project run as expected, tight project management will be needed. A project manager with less experience will cause the failure or extension of the project. So, the severity of this risk will be 7. The likelihood for this risk will be 8

because for this HUGO, too many things need to be handled and to communicate with too many parties. The project management should adjust all the time. As a result, the detectability will be 5 as there will be some problems during the process of the project management.

G. For the workflow risk, the only risk is that in the electronic world, many files are recreated by staff. This risk is not very serious, so the severity of this risk is set to 6, but this risk will happen frequently, so the likelihood will be 7, and the detectability is set to 6 because this kind of risk will not be able to have design problems.

H. Technology will be a small risk. This risk refers to building a reliable system and for users to use easily. Even when technical issues happen, it can be solved quickly by experts. But the whole project is based on technology, so the severity of this risk is considered to be 6, the likelihood is set to 5 because as long as a system is settled up, it will not encounter issues frequently. As for the detectability, it is set to 7 because this risk will not be able to make the whole project fail.

I. As long as the project finishes, time is still needed for users and patients to get used to it. So, if training and support is removed too fast, it will cause chaos. But this risk is still controllable. So, the severity of this risk is set to 6 and the likelihood is set to 5 because it is not likely that some staff will be required to quit their jobs just because the project is finished. The detectability of this risk is set to 7 because this risk will not affect the whole project.

J. This risk refers to when the project finished, there might not have a backup plan for staff to deal with unexpected issues. This risk is about something after the application of the project. So, it will be the last risk. The severity of this risk is set to 5 because

when there is no backup plan, it will take longer for staff to deal with things and will probably make some mistakes during the process. The likelihood is set to 3 because there is usually a second plan for a project. And for detectability, it is set to 8 because when this risk happens, it only will cause more time to fix it and it will not be able to affect the whole project.