

ACS 3801 - Principles in Information Systems

Term Paper – Fall 2020 (Oct 15, 2020)

Scenario

CEO of Central Region Health is concerned that COVID-19 will experience a significant increase in positive cases being diagnosed. In turn this will increase the demand on hospital beds for critical cases to increase from an average of 25 patients up to an average of 100 critical patients. After some analysis by the Acute Care team they are recommending that a temporary site be setup to take non-Covid-19 related patients while the Covid-19 patients are treated at existing hospitals. This will mean that as new Covid-19 patients are accepted at an existing site, non-Covid-19 patients will be sent by ambulance to the new temporary hospital. This will ensure that Covid-19 patients are separated as much as possible from other at-risk patients.

The new site has already been identified and seems ideal for conversion to a temporary hospital. Electrical, HVAC and basic network services will need to be put in place. Signage for rooms, wards, treatment room and general information etc. has been agreed with local business and will be put in place once the basic services are in place.

The CEO requires a plan for establishing of the temporary site, it will need to detail the critical services that will be required to operate the site, including equipment, staff, pharmacy, software and infrastructure. How long will this take to make ready?

Policies have been put in place related to COVID-19 that control the scheduling of patient visitors. A new service is required to support the scheduling of visitors to see their relatives. The goal is to ensure that a patient cannot have more than one visitor at any time (between 8am and 8pm daily), in addition there are to be no waiting rooms for visitors, they are to arrive on site and go straight to see their respective patient. There is no current service which can perform this task so a new service must be purchased or build using the internal application development team. Some existing services can be leveraged like network, service desk etc. It is important to be able to track patient/visitor contacts in case a visitor test positive some day for COVID-19.

The CEO recognises that the introduction of a new site (and associated software systems) will have an immediate impact on staff. It is therefore important to have a plan that will minimise the impact to staff, patients and visitors. Discuss in your paper your projects approach to organisational change, for example, how will those involved be engaged, are there any training requirements, and how will they be supported operationally after go-live.

Term Paper (40% Marks)

Your objective for this paper is to outline your plan and detail the main steps that must be taken in order to make the new site operational. Explain governance required to support the implementation and keep the stakeholders informed and aware of the plan and progress throughout the implementation.

A new service has been identified as being required to schedule visitors to see patients. Detail in your paper how your team will procure the new service and the process that will be followed. In addition, detail how the scheduling system would work (use business flow diagrams or other tools) to explain the flow of visitors to the site to minimise contact and visitor tracking.

Presentation (10% Marks)

A key part of this plan is to give a short presentation to the CEO and the Board of Directors detailing your plan.

Example Talking Points:-

- Identify key stakeholder and decision makers
- Identify key services
- Visitor Scheduling Application overview
- Managing Change

Appendix A: Main Service Providers & Services

Functional Team	Application/Services	Comments
Acute Care	Electronic Patient Record (EPR)	Main patient health information
	Admit, Transfer, Discharge (ADT)	Patient Management within a facility
	Pharmacy Drug System (PDS)	Patient Orders
Coordination of Care	Patient Registry	
	Ambulance Services	
Facilities Management	Facilities Services (Room Care)	Room clean up, stretcher services, wheelchairs
Diagnostic Services	Laboratory Information Systems (LIS)	Lab tests and results
	Electrical Services	
	Heating and Ventilation (HVAC)	
Human Resources	Human Resource Information Systems (HRIS)	Hiring, resource management, time tracking, pay
Clinical Engineering	Medical Devices	Blood pressure monitors, EKG, respirators, crash carts
Finance	SAP Information Systems	Cost Center Information and budgets
Project Management Office	PMO Services	Plan Implementation
Infrastructure	Network	Drop off points, internet, intranet, wifi,
	Service Desk	Service requests, incident management, change management
	Telecom	Telephones, cell phone, vendor management
	Desktop Services	Desktop, Printer, Laptops, base software applications (MS Word, excel)
	Account Management	Create, change, delete user accounts
Legal	Legal Services	Contracting, Facility Registration
Business Analytics	Dashboard Service	Reporting, counts, summary reports
Application Development	Custom application development services	Web applications, report development