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FASTMEDICS: ONE STOP CENTRE

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ABSTRACT

The need for an integrated mobile healthcare App to bridge the government and private sector is more crucial now than before. Least we thought that our nation will have to face a pandemic such as Covid-19. We should strive to upkeep our healthcare industry at par with the developed nations, firstly not only to curb the current pandemic more systematically but also to scale the current infrastructure system in the healthcare industry on a one-stop platform. Fastrexs (M) Sdn Bhd. is introducing FASTMEDICS – mobile healthcare App. It comes in a timely manner to render an effective and efficient tool which aims to provide solutions for the current pandemic at present. Besides, FASTMEDICS also corresponds with Ministry of Health's (MOH) vision based on MOH report 2019.

Keywords: Counting tool, mathematics, primary school, abacus

1. INTRODUCTION

The need for an integrated mobile healthcare mobile App to bridge government and private sector is more crucial not only to curb the current pandemic more systematically but also to scale the current infrastructure system in the healthcare industry on a one-stop platform. Mobile healthcare App is needed to render an effective and efficient tool to provide solutions for the current pandemic at present (MOH report 2019). The FastMedics mobile App is a patient-centric App to meet the increasing demand for digital health among patients and the healthcare industry.

The App will allow interoperability between all healthcare services including allied and auxiliary healthcare services. All services through FastMedics mobile App will leverage the smartphone users as it enables the connectivity among the service Providers-Patients-Payers. The mobile App will schedule appointments, notify the patient if the doctor is running late, help monitor medication and its side effects, help patients follow their health plans efficiently, and store patients' medical records electronically. Notification will be sent to patients and healthcare providers through their portal to take the next cause of action. Doctors and healthcare personnel will remain informed about the patient's conditions and it will promote a seamless treatment in an efficient manner.

Integration of government and private healthcare providers promotes patient-centric that comes with personalized healthcare and creates best practices for patient-care. Patients will be able to book appointments, reschedule their appointments and receive notification before arriving at the door of any healthcare providers. Patients will be well-informed on their health status, be more accountable, and complying with their own treatment in an empowered manner. The healthcare industry is highly data driven and FastMedics mobile App will be able to produce centralised healthcare data (big-data). The Ministry of Health can use it effectively for future strategic planning for Healthcare Providers, Patients, and payers (Gheorghiu & Hagens, 2017). FastMedics mobile App will play a vital role in creating an eco-system in the healthcare industry by connecting the Providers-Patient-Payers.

2. PROBLEM STATEMENT

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The intersectoral collaboration between ICT and health is key to realizing the full potential of digital health so that it responds to national health priorities and drives progress toward universal health coverage (Report, 2017). For policymakers, a vital first step is to set a digital health strategy that lays out a compelling vision and provides clear direction to all stakeholders in the health system (Report, 2019). Currently, many national healthcare systems face a lack of interoperability between their data sources and patient management systems. Inconsistent use of existing standards can also be at fault. The FASTMEDICS App is hoped to create an eco-system in the nation's healthcare industry that will positively contribute towards disease prevention, disease management and promote a healthy lifestyle, by connecting the Providers-Patient-Payers. Inbuilt notifications will reduce defaulting appointments, treatments, laboratory and medicine collections. Hence, there is a need to develop a one-stop to curb the current pandemic more systematically and to scale the current infrastructure system in the healthcare industry.

3. OBJECTIVES

1. To elicit the perceptions of patients in using the FASTMEDICS Mobile App to arrange their healthcare procedures.
2. To ascertain the perceptions of medical personnel in using the FASTMEDICS Mobile App to coordinate their patients' healthcare procedures.
3. To evaluate the effect of the FASTMEDICS Mobile App in improving the interoperability between the service providers and patient management systems.

4. RESEARCH QUESTIONS

1. What are the perceptions of patients in using the FASTMEDICS Mobile App to arrange their healthcare procedures?
2. What are the perceptions of medical personnel in using the FASTMEDICS Mobile App to coordinate their patients' healthcare procedures?
3. To what extent the FASTMEDICS Mobile App improves the interoperability between the service providers and patient management systems?

5. LITERATURE REVIEW

Electronic Health Record (HER) improves patient outcomes over time. Hydari, Williams and Zimmer (2014) argued that EHRs reduce adverse drug events by 52%. Some are designed to integrate with bar code scanning technology; if medical personnel scan the wrong medication, an alert pops up alerting him or her to a problem. Critical lab values have to be reported to the healthcare provider in a timely manner. The EHR flags each critical value for clinical staff, making notifications simpler for the service provider. The EHR also helps clinicians determine when to repeat a lab test (How can electronic, 2013). Another way an EHR improves treatment and clinical outcomes is by reducing the number of duplicate tests and improving overall efficiency (Health Physician HER, 2016). The EHR also stores radiology results, which can be accessed from within the application if clinicians need to view the actual X-ray or the report from the radiologist (HealthIT.gov. 2013). All reports are accessible to all clinicians involved in the patient's healthcare and can be viewed at any time.

Keeping all information safe is a major challenge for all members of the healthcare team (Hoover. 2016). EHRs make this easier and improve accountability with audit trails and security that detail who has accessed the medical records and when, and what the individuals did while accessing each record. EHRs also keep information safe from anyone who does not have permission to see patient data. Patients have access to their own EHRs through patient portals and can read, print, and send their health information to providers. Ricciardi (2012) advocates that EMR empowers patients to be responsible for their own healthcare. Finally, EHRs help patients and clinicians with medication reconciliation. A medication list compiled from the EHR can be easily retrieved and updated at each

patient visit. This makes maintaining a current medication list relatively easy for patients and providers Active Medication List (2014).

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As EHRs store massive amounts of data that are readily available, they are invaluable for performance improvement projects and quality assurance. Facilities can also use these data in more expansive ways. For example, clinical researchers, working with EHR vendors, have established standards and processes to use EHR data to improve the speed of the research cycle and rapidly inform clinical decisions," (Kush, 2012).

EMR gives healthcare providers vital information regarding a patient's health history, previous and current medications, allergies, family history, and any other pertinent information that may be necessary to properly diagnose and treat a patient. Ultimately, the EHR gives providers comprehensive data that can guide them to more accurate, reliable diagnoses (HealthIT.gov, 2014). Despite all these potential benefits to clinicians and patients, nurses are not satisfied with EMR because when administrators choose an EHR, nurses are often left out of the discussion (Perna, 2014).

When a facility chooses an EHR that works for all stakeholders, these systems can improve patient care, nursing documentation, and patient outcomes, and will continue to revolutionize the healthcare industry with advancements in technology. EHRs are rapidly becoming the norm for medical records throughout the country, and patients and nurses alike stand to benefit.

6. DATA COLLECTION

In this research, two methods of data collection will be employed to generate the primary data which is individual interviews and focus group interviews. These data collection methods are discussed below in the following sub-sections.

6.1: The interview questionnaires design

Interview Questionnaires will be designed to establish the participants' expectations about the EHR implementation and planning at the selected Hospitals. Each of the questions was coded directly in relation to the research objectives (RO) and/or the research questions (RQ). The design of the interview questionnaires was strongly influenced by three studies reviewed in the literature and from the researcher's knowledge. These are discussed in turn presently.

7. EXPECTED OUTCOMES

The FASTMEDICS Mobile App will become the interoperable platform that allows care coordination between patient/customer and services provider - information on healthcare services are scattered, service providers operating on many platforms. It also brings patients, services providers, allied health services, insurance, and corporate companies on a single platform which allows patients to better manage their healthcare through their mobile devices. Other than that, it is believed that this mobile App will reduce cross-infection among staff.

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