### UNIVERSITI TEKNOLOGI MARA

# READINESS ASSESSMENT OF ELECTRONIC MEDICAL RECORD SYSTEM IMPLEMENTATION AT INSTITUTE JANTUNG NEGARA

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#### **ABSTRACT**

The purpose of this study is to determine the Readiness for Implementation for Electronic Medical Record (EMR) System among Institut Jantung Negara (IJN) staff especially with regards to IT initiative towards paperless system. It is an activity used to determine the degree of readiness for an organization like IJN to execute a major project and to identify specific areas to focus during the preparation process, adoption and implementation. The research design is based on the previous research from literature review. Our focus of survey based on a case study and using survey and interview approach to explore the context and nature of the event to obtain a comprehensive view and understanding of the readiness result before the use of an EMR system. By using The Readiness for Implementation Model (RIM Model) to predict EMR system implementation success in IJN, the RIM Model has been identified as the most suitable framework to measure the readiness for EMR implementation due to the unique characteristics and the RIS Scoring method (Gustafson et. al., 2007). For this study, the outcome of the assessment could assist IJN in identifying the based data on the gap analysis. IJN can then developed specific intervention and action step to prepare each stakeholder groups for the change within EMR system. Each action should be incorporated into an articulated plan with specific steps, due dates, responsible parties and metrics for measuring success. For Institut Jantung Negara (IJN), focus to People Readiness and Organization Readiness is the most important part for the critical success factor for the EMR project. Status appraisal of the study will give deeper understanding of the challenges that translate directly into potential risk that have to be addressed, monitored and mitigate (Open Group Standard (2011) by the hospital and each action should be incorporated into an articulated plan as mentioned before. The readiness assessment factors could be the fundamental needs of human services experts about the EMR framework yet it additionally delineates the required equipment, programming and individual's product for the accomplishment of EMR framework in hospitals.

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#### **CHAPTER ONE**

#### INTRODUCTION

# 1.1 ELECTRONIC MEDICAL RECORD (EMR) IN HEALTHCARE SETTING

Storing information through electronic records has given full advantages to any organization that already transform their paper based record through the technology. As technology advances, the benefits that the organization get from the data has proven that it gives powerful information to the organization in making fast decision especially in this challenging globalization competition. The healthcare industry has no exception in facing the similar condition and majority of the hospital now moving forward to have a complete electronic record system. Transforming the paper-based record to electronic medical record to store patient records and other pertinent information, could be shared between the doctors from different medical practices and locations. This will ease access to healthcare provider to important patient information.

Information technology has played a significant role in providing the catalyst to improve the health care systems through improvements of information systems that provides the backbone of managing medical paper records to get patient health condition throughout their life has become a big hassle to most of the hospital because collection of information in the paper records are unorganized, labor intensive and cannot be retrieved in a timely manner. Difficulty in managing many forms especially in treating chronic illness which required frequent monitoring to the patient especially in supporting continuous patient care. For example, according to Institute of Medicine (2001), p.16 "automation of clinical, financial, and administrative transactions is essential to improve quality, preventing errors, enhancing consumer confidence in the health system, and improving efficiency."

This thesis is to explore and analyze how the "Readiness for Implementation Model" being used to measure the readiness of Electronic Medical Record (EMR) adoption and implementation. More often than not, implementation of EMR will require reformation in organizational behavior which involves realignment of