

## **Integrated KMS@EWS of Conceptual Implementation Model for Clinical Dengue Fever Environment**

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### **ABSTRACT**

Early warning system (EWS) is a technology to mitigate risk is used to disseminate timely information. Then knowledge management system (KMS) is used to support for decision facilitation will integrate with EWS to disseminate timely information with proactive early warning. Issues on timeliness for timely reporting and decision facilitation are regarded as main challenge for mitigation of risk. Therefore in this paper, we suggest the model of integration between KMS and EWS known as KMS@EWS as a solution to support early warning for timely reporting and to guide on decision facilitation. The integration model is to combine the knowledge management (KM) processes, activities and technologies with the EWS functionalities. The proposed model is based on empirical study by using literatures on EWS and KMS. In which we synthesize the analysis and findings of both EWS and KMS for the integration. We propose the implementation model in clinical diagnostic (CD) environment of dengue fever (DF) manifestation. This model is intended to provide early warning when any abnormalities or peculiar pattern of DF and symptoms arise and detected during the interaction between physicians and patients in the CD environment. Thus, this paper attempts to integrate relevant enabling KM technologies and processes with EWS components and functionalities into an environment that would support activities for early warning thru organizational

knowledge creation, use and management for timely reporting and detection by providing decision facilitation and initiate early warning of DF during CD processes.

### **KEYWORDS**

Early warning system, Knowledge management, Knowledge management system, Dengue fever, Clinical diagnostic.

### **1 INTRODUCTION**

EWS is a technology to mitigate risk is used to disseminate timely information can be integrated with KM processes, activities and technologies. In which KM is regarded as confluence of processes, activities and techniques to facilitate the creation, codification, dissemination and application of knowledge that can be integrated with EWS functionalities to enable the knowledge flow in CD environments. CD environment which comprises activities for interaction between physician and patient to obtain a diagnosis of the disease and to select therapy [1] is used for implementation of integrated model between KMS and EWS known as KMS@EWS. The idea of using CD environment for the implementation is due to the activities involved during CD process namely history taking (HT), physical examination (PE) and investigation (IV) can provide early warning of disease

























