Project Design Phase-Part 2

Open Source Frameworks

Team Id	NM2023TMID04415
Project Name	Block Chain Technology For Electronic Health Recods

Introduction:

Some of the widely accepted benefits of implementation Electronic Health Record (EHR) systems into health organizations include secure clinical information, improved hospital administrative affairs, availability of e-prescription, and better management of patients and hospital staff .[1,2] Multi-aspects operations of the patient and extensive management of hospital staff make the prevalent health systems more complicated and prone to administrative mismanagement.

Existing literature review:

We started our study with review of existing literature quite carefully to segregate studies related to Open-Source Electronic Health Record (OS-EHR). Review followed two steps specifically: firstly to select research studies related to open-source Electronic Health Record (OS-EHRs); secondly to determine the studies having scope and relevance of open-

source utilization or model-based evaluation. We obtained research article from web based research databases like, Web of Science (Wos), Scopus, pugMed, Medline, Google Scholar and IEEE-Xplore, etc.

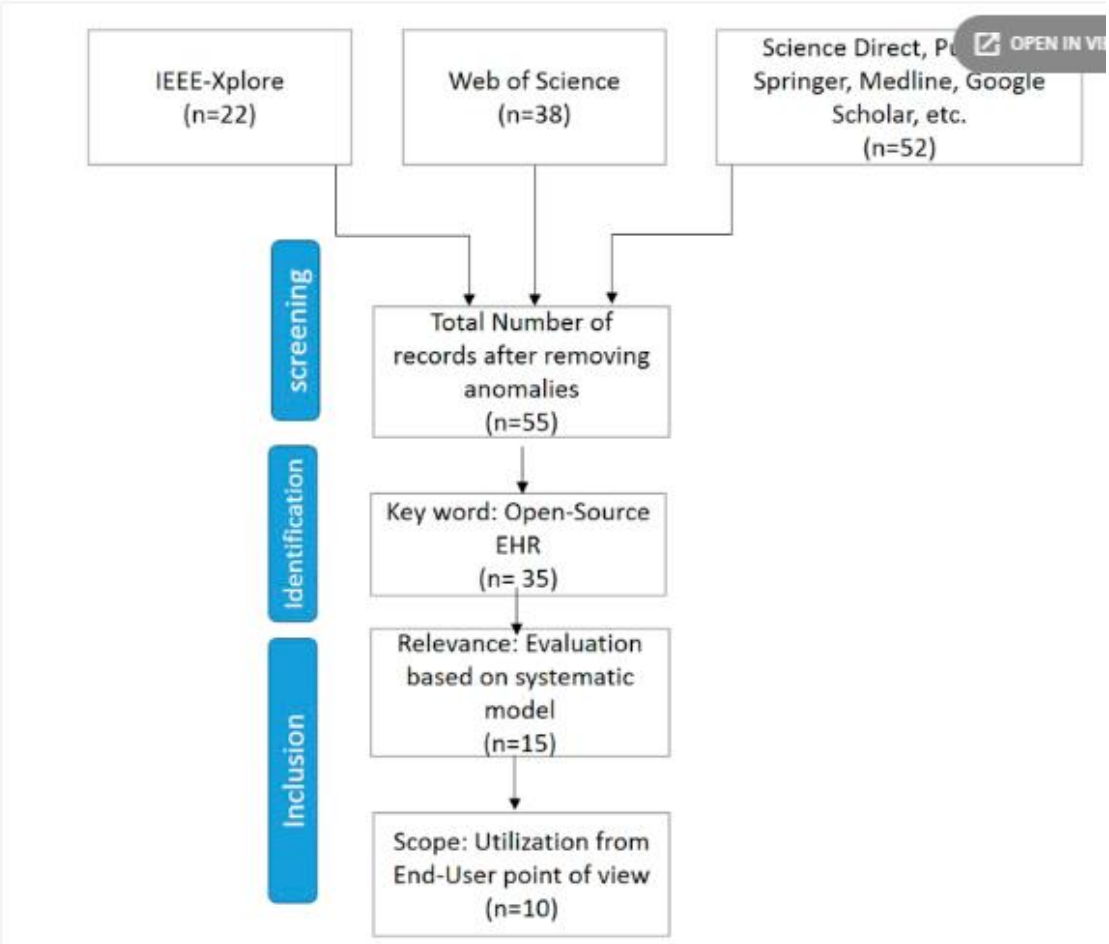

Figure 1. Flow diagram for article selection process.

Workflow of HIMSS Analytics EMRAM:

As explained earlier, efficacy of patient care is subject to collaboration of all the basic components of Health Information Systems. These basic systems are sought to be implemented successfully for

meaningful use of OS-EHRs technology. Researchers have reached to the conclusion that complete Electronic Medical Record Adoption (EMRAM) is contingent to integration of maximum health information into clinical workflows. In the process, there has been efforts to achieve productivity and simplified ambulatory care settings for EMRAM based clinical workflow. Diagrammatic representation of HIMSS Analytics EMRAM (stage 1 to stage 7) based clinical workflow and their corresponding sub-systems is presented in Figure 2.

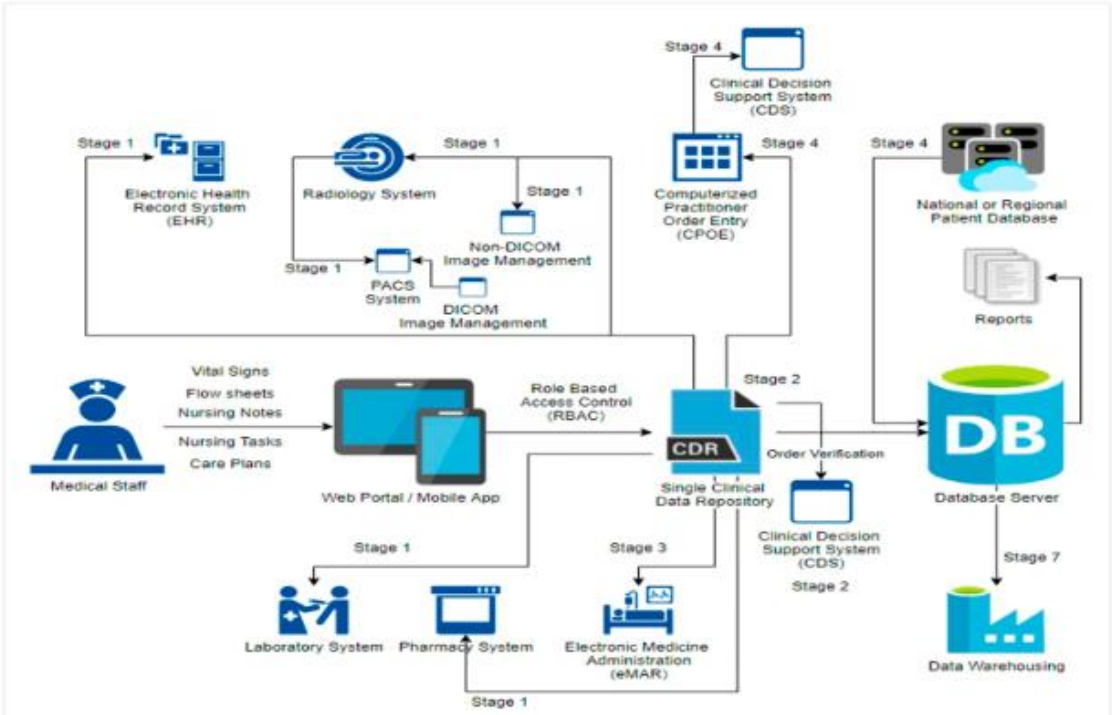

Figure 2. HIMSS workflow.

Conclusion and Future Work:

This study is aimed to investigate more advanced features of open-source EHR. We have presented qualitative analysis of open-source EHR rigorously. Indeed, our effort is to help health organization to rank their prevalent OS-EHRs and consequently improve, enhance and upgrade them for better health care services. It was quite necessary to investigate OS-EHRs in-depth, as relevant prevalent literature does not address utilization of OS-EHRs beyond spectrum of profiling reporting. Comprehensive analysis of OS-EHRs based on HIMSS Analytics EMRAM (systematic reference model for clinical workflow analysis) is unique attempt of this review study.

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