DESIGN OF THE REGISTRY METAMODEL FOR ELECTRONIC HEALTH RECORDS STANDARDS ISO/IEC 11179 in SURABAYA HAJI GENERAL HOSPITAL

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ABSTRACT

A good health services will simplify the process of health data. At this time, data management has been implementing the electronic health record systems of health care in an institution or health institutions such as health centers, hospitals and clinics. But the definition of the system is still unclear, and the name has not been well structured. For that involve electronic health care data management needs to be designed in a structured and integrated so that the system can run well in aligning the data on the health care system. This study will focus on the use of terminology metamodel percancangan concepual registry based on the data in the data model (CDM).

The design of the registry metamodel is done in many steps using a case study of Surabaya Haji General Hospital. First, observation and interviews conducted through direct observation of the business processes of the healthcare sector Surabaya Haji General Hospital. Then the data architecture is designed based on the results of previous data collection in the form of conceptual data modeling (CDM) existing hospital information system and analyze the items required to support the
design of the registry metamodel. Furthermore, the registry metamodel is designed using conceptual terminology that refers to the data elements on the standard of the International Organization for Standardization (ISO) / International Electrotechnical Commission (IEC) 11179 about naming and data definitions. Once the registry metamodel was built, the next step is the verification stage. Verification stage is used to ensure the registry metamodel that already meet the standards of ISO / IEC 11179 to improve the system of naming and data definitions on Conceptual Data Model (CDM) and arranged in the form of Data Dictionary.

Outcomes in this thesis is the Data Dictionary based registry metamodel has been adjusting the standard ISO / IEC 11179 in the health sector Surabaya Haji General Hospital. With these efforts are expected to provide an overview of data management in the health care system and the data can be proposed to the city health centers to improve health data sector data system that can be in harmony and sharing between organizations.

Keywords: Electronic Health Record, Conceptual Data Model, CDM, Data Dictionary, Registry Metamodel, ISO/IEC 11179, Surabaya Haji General Hospital