



# DESIGNING A DIAGNOSE CODE PREDICTION SYSTEM IN ORDER TO SUPPORT MEDICAL RECORD ELECTRONIC GOVERNANCE USING AGILE METHOD

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**Abstract :** Build an electronic medical record system that can support health services for the community in the Primary Health Center work region is the goal of this study. The goal of this system is to replace the existing one, which is still largely manual and naturally requires a lot of resources in terms of time, money, and energy. This study's system development methodology techniques employ the AGILE methodology. According to research findings, there are many different types of issues, including 1). Health service activities are not integrated into any system, and medical record activities are manually installed. 2). There is no medical record reporting because the medical record unit is thought to be restricted to simply documenting the health services that patients received also The utilization of medical records and maintaining the quality of medical records cannot be maximized because KLPCM were not carried out. 3). Morbidity Codification and classification are only for referral patients and BPJS users.

**IndexTerms -** Medical Record Electronic, Information System, AGILE, Primary Health Center, Morbidity Codification and Classification.

## I. INTRODUCTION

According to Health Services of the Ministry of Health of the Republic of Indonesia (2009) are "any efforts organized alone or jointly in an organization to maintain and improve health, prevent and cure diseases and restore the health of individuals, families, groups and or communities"

In this case, hospitals are an important part of the health system. The hospital provides complex curative services, emergency services, knowledge transfer centers, and technology.

According to WHO ( World Health Organization) permanently staffed by at least one physician, can offer inpatient accommodation, and can provide active medical and nursing care

In supporting excellent hospital services, it has become a mandatory part to be supported good medical record management. For its management, Medical Records are divided into several work activity units, namely: Patient Registration, Medical Record File Assembling, Medical Record Distribution, Medical Record Return, Medical Record Filling, Daily Census, Qualitative Analysis and Quantitative Analysis of Medical Records, Disease Codification, V claims insurance, any indexing report using medical record, Reporting to Medical Record File Retention.

In its implementation, Medical Recorders often have obstacles, one of which is the discrepancy in the disease code in Hospital reporting and V Claim Insurance as well as in the Medical Record File. Disease codification itself has rules that are permanently determined, for its implementation some disease codifications can be not the same or appropriate because the coding process follows the rules in sequence. This is a big obstacle where medical recorders are faced with the choice to match the rules or according to the actual disease. It is also a matter of time to get the right code, usually, if you follow the rules of codification it will take quite a long time and if the coding is done by not following the rules in sequence it will be more able to cut time.

According "Accuracy of Clinical Codification based-on ICD-10 in Primary Health Center and Hospitals in Indonesia: A Literature Review" by Angga Eko Pramono<sup>1</sup> Nuryati<sup>2</sup> Dian Budi Santoso<sup>3</sup> Marko Ferdian Salim<sup>4</sup> from Departemen Layanan dan Informasi Kesehatan, Sekolah Vokasi, Universitas Gadjah Mada, "The coding application must comply with ICD-10 to get the correct code so that it reflects the actual health condition." Their research sought to determine the level of clinical categorization accuracy and the factors that influence it in Indonesian primary health care and referral health care institutions (hospitals). A systematic literature review was applied to a number of published research articles from 2009 to 2019. Three online databases, 19 journals, Google Scholar, and online proceedings were used to gather literature. The total number of papers received was 458, with 45 publications meeting the research criteria. According to the majority of the papers, the accuracy rate of diagnosis code at primary