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## DESIGN OF INFORMATION SYSTEM FOR LABORATORY MEDICAL SUPPORT SERVICES AT PUSKESMAS KOPO BANDUNG

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### Abstract

The aimed of research result was purpose to design and build implementation of services information system for laboratory medical support at UPT Puskesmas Kopo Bandung. The main problem that happened at UPT Puskesmas Kopo bandung is not yet computerized medical laboratory process of service of medical support laboratory as data processing still found difficulty. Data collection technique is with observation interview and literature review. Software developing method using waterfall method with Data Flow Diagram (DFD) as software design. Implementation using Microsoft visual studio 2010 programming language, database using acces and software test using blackbox method. The suggestion given to overcome the problems in system of medical support service laboratory are : Need better way developing system , Need training for human resources that manage this related application system.

**Keywords:** Information System, Laboratory Service, Waterfall, Microsoft Visual Studio 2010

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### Introduction

Over time in the field of technology and communication has progressed very rapidly so that it has an impact on the world of health which has progressed in health services provided to the community. One of the advances in information technology penetrated the field of health such as medicine. Progress in the health sector is growing so rapidly, so many findings are obtained with the help of information technology both in the field of organizing hospitals, health centers, treatment and research development of health science itself. The combination of information technology with the activities of people who use the technology, to support operations and management is an information system. In a very broad sense, the term information systems is often used to refer to interactions between people, algorithmic processes, data and technology. Health factors are one of the important factors in people's lives. According to Permenkes NO.269/MENKES/PER/III/2008 states that every health service facility is required to hold medical records. Medical records are files that contain records and documents about the patient's identity, examination results, treatment, actions and services that have been provided to patients. Puskesmas according to (Effendi, 2009) is the Technical Implementation Unit of the Health Office responsible for organizing health development in its work area. As an organizer of health development, puskesmas is responsible for organizing individual health efforts and public health efforts, which in terms of the National Health System is a first-level service in addition to medical services, puskesmas also has types of medical support services. Medical support is a service that supports medical servants who function so that the treatment and care provided are more optimal. The role of the laboratory in the puskesmas has now become a part that is quite necessary, because it is needed to determine a diagnosis of disease. The management of health laboratories is based on the regulation of the Minister of Health of the Republic of Indonesia number 37 of 2012. According to the regulation of the minister of health, what is meant by puskesmas laboratory is a puskesmas health service facility that carries out measurement, determination, and testing of materials derived from humans to determine the type of disease, cause of disease, health conditions, or factors that can affect individual and community health. The system that runs at UPT Puskesmas Kopo Kota Bandung regarding laboratory medical support services is still carried out manually, laboratory officers still record patient data and laboratory results in the register book, making laboratory test results is very long and making laboratory reports is still done manually.