CHAPTER I

INTRODUCTION

This chapter contains of research background, problem formulation, research objectives, scope of the research, and the outline of the final project report.

1.1   Background

Health service companies today are growing rapidly, both in terms of quantity and quality. This issue causes high competition among health service companies for customers, coupled with increasingly selective customer behavior in determining the products or services to be purchased, requiring the management of health service providers to always improve the quality of their services (Anwar, 2010).

Hospital as one of the health facilities is demanded to improve and pay attention to the quality of health services which are oriented towards achieving the satisfaction of patients, doctors and nurses. It also aims to maintain the existence of health services in hospitals, so that they can compete with other hospitals in this current era. Therefore, it is demanded the ability and skill of health service providers in order to win the competition, by providing high quality services (Oktaviantari, 2012). Nowadays, hospital competition is getting tougher with the increasing number of existing hospitals, so that hospitals are required to be more competent by improving existing services, as well as providing the best health services to the public people and oriented towards individual health (Adellia et al, 2014).

A method that can be used to improve service processes in operational management is lean management. This method can meet all operational, strategic and tactical scales. Besides, lean also reaches business units, manufacturing, and the core of the organization. Lean management which applied in hospitals is known

as lean hospital, which is a set of system management tools, and a philosophy that can help hospitals change their organizational arrangements to be much better and more productive. This method offers a solution to hospitals to improve the quality of patient services by reducing errors and waiting times. Lean is able to strengthen the organization of the hospital in the long time, and gives the hospital an ability to do the development (Graban, 2012).

The lean method prioritizes the process flow, because patient service can work well if the process flow is going smoothly. Therefore, things that obstruct the flow of the process must be removed because it is a waste that can interfere the services. Lean hospital helps medical staff to observe the process and analyze the points where an error occurs, and correct the error itself, not with orders or instruction from superiors (Naraghi and Ravipati, 2009).

Lean in hospital means using less time, money, inventory and space to increase value from the patient's perspective. The purpose of using lean is to remove activities that provides non-value added from the process, so that each activity in the process provides added value from the patient's perspective. The flow of the service in the hospital that often complained by patients is the doctor who comes not on time, the waiting room is less comfortable, and the medical record is often late (Graban, 2009). In order to minimize this problem, improvements need to be made by implementing the lean method.

The lean method in Indonesia is more widely known in the manufacturing industry sector. Not many non-manufacturing sectors including hospitals are familiar with this term, so that the application of lean methods in Indonesian hospitals is still small (Pertiwi, 2012).

One hospital in Indonesia that has implemented this method is the Mother and Child Hospital (RSIA) Kemang Medical Care, located on Jl. Ampera Raya No.34, Ragunan, South Jakarta City. The hospital is implementing a performance improvement project through the efficiency of outpatient services, which aims at

increasing patient satisfaction. By applying the lean method, this hospital can save goods by 28%, reduce inventory value by 13%, and shorten the waiting time in services at children's clinics, from 78 minutes to 46 minutes (www.kemangmedicalcare.com). Other hospitals that apply the concept of lean hospital are Park Nicollet Health Services (PNHS) in Minneapolis and Virginia Mason Medical Center (VMMC) in Seattle, Washington (Kim and Spahlinger, 2006).

Universitas Andalas Hospital is a State University Hospital (RSPTN) which is under the supervision of Universitas Andalas. The hospital is located in the Universitas Andalas Limau Manis campus area, Kecamatan Pauh, Padang city, West Sumatra. The services in this hospital include outpatient services, inpatient services, operating room services, emergency services, pharmaceutical installations, referral patient services, ICU services, ambulances, support services (radiology, laboratories and nutrition) and are equipped with radiotherapy facilities (www.rsp.unand.ac.id).

Universitas Andalas Hospital follow the minimum waiting time service standard according to the Decree of the Minister of Health Number 129 / Menkes / SK / II / 2008 which can be seen in Table 1.1.

Table 1.1   Hospital Minimum Waiting Time Standards

No	Services	Indicator	Standard
1	Outpatient	Waiting time of outpatient service	≤ 60 Minutes
2	Pharmacy	Waiting time of service	
		Finished medicine	≤ 30 Minutes
		Concoction medicine	≤ 60 Minutes
3	Medical Record	Time to provide outpatient medical record documents	≤ 10 Minutes

Based on the results of a preliminary interview with the head of outpatient installation at Universitas Andalas Hospital, the waiting time for patient services is relatively long. Based on preliminary study, the waiting time in the outpatient

installation was 95.2 minutes. The flow of services for outpatient service begins with taking a queue number before registration. For old patients, after registration it will be sent to the medical record section to find the patient's document, while new patients need to make a medical visit card first. Medical record documents will be sent to each polyclinic for consultation of patients by specialist doctors.

Preliminary study conducted on 10 outpatients at Universitas Andalas Hospital, found 9 out of 10 patients said the waiting time for services starting from registration until consult with doctors is more than one hour while the standard waiting time for hospital services is ≤ 60 minutes. Based on the preliminary study of the 10 respondents, the average waiting time in outpatient services was 95.2 minutes.

These problems must be resolved so that the hospital is able to comply the minimum hospital service standards set in the Decree of the Minister of Health Number 129 / Menkes / SK / II / 2008. Therefore, Universitas Andalas Hospital needs to make efforts to reduce non-value added (NVA) activities to expedite the flow of processes using the lean hospital approach.

Improvements need to be made in outpatient installation so that patient waiting time can be reduced. Improvements are going to be made using the concept of lean hospitals. The use of lean hospital methods is carried out to eliminate, or add, and improve existing processes to reduce the waiting time of outpatient services.

1.2   Problem Formulation

The problem formulation in this study is how to minimize the waiting time for outpatient service in Universitas Andalas Hospital using lean hospital method.

1.3   Research Objectives

The purposes of this research are as follows.

1.   To measure the waiting time of outpatient service in Universitas Andalas Hospital.

2.   To identify value added activities and non-value added activities of the outpatient services in Universitas Andalas Hospital.

3.   To provide some improvements on flow processes by reducing non value added activities.

1.4   Research Scopes

The scopes in this research are as follows:

1.   The case of the research will be taken in Universitas Andalas Hospital, in Padang City, Indonesia.

2.   The area of studies was the flow of the outpatient service process in Universitas Andalas Hospital.

1.5   Outline of The Research

This part contains of the systematic writing of the final project report which are as follows:

CHAPTER I INTRODUCTION

This chapter explains the background of the research, the problem formulation, the objectives of the research, scope of study and the outline of the final project report.

CHAPTER II LITERATURE REVIEW

This chapter contains the theories used in this study such as lean concepts, waste, Value Stream Mapping (VSM), Value Added Assessment (VAA), root cause analysis, Failure Mode and Effect Analysis (FMEA), required data measurements and previous research review.

CHAPTER III RESEARCH METHODOLOGY

This chapter contains the procedures and methods used in conducting the research.

CHAPTER IV DATA COLLECTION AND PROCESSING

This chapter consist of the data collection and data processing used for the research.

CHAPTER V ANALYSIS

This chapter contains the analysis of data prosessing result such as Value Stream Mapping (VSM), Value Added Assessment (VAA), fishbone diagram, dan Failure Mode and Effect Analysis (FMEA).

CHAPTER VI CONCLUSIONS AND SUGGESTIONS

This chapter contains the conclusions of the research and the suggestions to the further study.