

# ANALYSIS OF THE CALCULATION OF HEALTH HUMAN RESOURCE NEEDS FOR MEDICAL RECORD OFFICERS USING THE WORKLOAD INDICATOR STAFF NEED (WSN) METHOD

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## A B S T R A C T

*The need for human resources (HR) in the health sector nationally is very important to provide an adequate and qualified workforce in providing health services to the community. To determine the human resource needs of medical record officers, based on the Workload Indicator Staff Need (WISN) method, the Wolio Health Center uses a qualitative approach with a descriptive methodology and data collection methods that include interviews and observations. There are four medical record officers with a D3 medical record education background who are interested in working in the field of medical records at the Wolio Health Center which every year is recorded to get 8,529 visits. The results of the study show that the determination of Available Working Time (WKT) at the Wolio Health Center is 228 working days per year, 109,440 hours per year. The Wolio Health Center has a standard workload of 1,473 patients. The standard for the relaxation of the Wolio health center has a total of 0.668. From the results of calculating the number of officers in the medical record unit, there are 4 with the background of D3 medical records and SKM. Meanwhile, based on the results of the analysis of labor needs, only 1 officer is needed with a background in medical records. suggestions are given to the Wolio Health Center to adjust the number and qualifications of medical record officers according to the results of this analysis.*

## INTRODUCTION

The methodical human resource (HR) planning process is used to forecast and ensure the number of human resources that will be needed both now and in the future. Puskesmas is defined by Sutadji (2010) as a health service institution that prioritizes promotion in its operational area and plans public and individual health efforts at the highest level (Permenkes No. 43 of 2019).

The patient's identity, test results, treatments, activities, and other services are documented in the medical record. To facilitate the management and access of patient data, electronic medical records, or EMRs, are digital copies of medical records created using electronic technology. (Regulation of the Minister of Health of the Republic of Indonesia, 2022).

Health Human Resources (Health Human Resources) are human beings who work in the health sector, regardless of the level of formal education, as referred to in the Regulation of the Minister of Health Number 33 of 2015. In order to encourage health development and improve the degree of public health, quality health human resources must be useful, equitable, and meet the requirements.

Health human resources (HRMK) is a process that involves demand and cooperation in health services to meet needs. Human resource planning is a systematic step to determine the number, type, and qualifications of human resources needed in accordance with regional situations and conditions in order to achieve health development goals (Ningtyas & Setiawan, 2023).

Human resource planning is a systematic and strategic activity to forecast future workforce needs in an organization, both in the public and business sectors. This process uses the right information to ensure the provision of the right quantity and quality of labor. Regulation of the Minister of Health No. 81 of 2004 regulates planning in the health sector and sets standards for planning hospitals, districts/cities, and provinces. The workload standard used as a guideline for assessing labor needs is the total number of jobs that can be completed by health workers in one year (Decree of the Minister of Health of the Republic of Indonesia, 2004).

The need for human resources (HR) in the health sector nationally is very important to provide an adequate and qualified workforce in providing health services to the community. Factors that need

to be considered include projected needs, service standards, labor distribution, education and training, health policies, and stakeholder collaboration. By paying attention to these factors, the need for health human resources nationally can be placed and regulated comprehensively to ensure the availability of adequate and quality health workers in providing health services to the entire community (Tuzzakiyah et al., 2022).

Based on the actual workload carried out by each category in the work unit of the health service facility, the Workload Indicator Staffing Requirement (WISN) technique determines the need for health human resources (HR). This technique helps in determining the type and quantity of human resources needed for efficient services (Wulandari & Indahsari, 2021).

Based on the results of initial observations made at the Wolio Health Center in March 2024, the number of medical recorders at the Wolio Health Center is 4 people, including 3 interns and 1 civil servant. The number of patient visits in January 2024 was 892 patients and February was 575.

## METHODOLOGY

This study uses a descriptive approach as part of the qualitative research methodology. The purpose of the descriptive method is to describe data and events accurately, realistically, and methodically. Descriptive research is a technique to establish facts with the right interpretation of the research topic, according to Santosa (2015). Based on the workload set with the WISN technique in the medical record work unit of the Wolio Health Center, this study seeks to find out how to assess the need for medical record personnel.

The location in this study is located at the Wolio Health Center on Jalan Pahlawan which is located in the outflow of Bukit Wolio Indah, Wolio District. The time of this research was carried out from April to June. The subjects in the study were 4 medical record officers and patients who received treatment. The object of this study is to calculate the standard workload of medical records using the WSN method.

## RESULTS & DISCUSSION

This study uses a descriptive approach as part of qualitative research techniques. The purpose of the descriptive method is to describe events and facts in a true, honest, and methodical manner. According to Santosa (2015), descriptive research is a method to establish facts with an appropriate interpretation of the research problem. This study aims to identify how to evaluate the needs of medical record staff based on the workload identified by the WISN approach in the medical record work unit of the Wolio Health Center. The following stages of calculating the workload indicator staff need (WISN) method are as follows:

### 1. Establish Available Working Hours (WKT)

The Job Creation Law No. 11 of 2020 states that working hours include day and night working hours. Longer work time will increase the workload, while less work time will reduce it. Based on the Regulation of the State Civil Service Agency No. 19 of 2011, effective working hours (JKE) are set at 1,250 hours per year. According to the Ministerial Regulation of PAN-RB No. 26 of 2011, JKE ranges from 1,192 to 1,237 hours per year, rounded up to 1,200 hours or 72,000 minutes per year, for employees who work 5 or 6 days a week. (Law of the Republic of Indonesia, 2020).

**Table 1.** Sets The Available Working Time

It	Code	Factor	HR Category	Information
1	A	Weekdays	260	Days/yr
2	B	Annual leave	12	Days/yr
3	C	Public holidays	16	Days/yr
4	D	Education and training	1	Days/yr
5	E	Absenteeism	3	Days/yr
6	F	Working time	8	hours/day
		Weekdays available	228	Days/yr
		Working hours available	1.824	Hours/yr
		Working hours available	109.440	Mnt/yr

Source : research results of the Wolio Health Center and processed by researchers, 2024

Based on the results of the above research, it can be seen that the determination of available working time is 260 days per year or 1,824 hours per year or 109,440 minutes per year. This determination is in accordance with 260 working days, 12 days of employee leave, 16 days of national

holidays in 2023, attending training 1 time a year and 3 days of absenteeism (absenteeism, sickness, Etc.)

## 2. Assign Work Units And Hr Categories

Determining work units and Human Resources (HR) is the process of identifying and determining certain work units or parts along with the categories or types of labor needed to carry out the tasks in them. This involves determining the organizational structure, dividing duties and responsibilities, and grouping the workforce based on the specialization or expertise required. By clearly defining work units and HR, organizations can ensure that each department has personnel that fit the needs of the job and can carry out their duties effectively.

**Table 2.** Determining Work Units and Categories of Human Resources

Health Facilities	Unit	Types of SDM
Wolio Health Center	RM Installati on	Medical recorder

Based on the results of observations to determine the work unit and category of human resources at the Wolio Health Center, it was explained that there were 4 medical recorders with a background of A.Md.RMIK, and SKM was divided into 2 registered and 2 in the medical record room.

## 3. Establishing Workload Standards (Sbk)

The workload standard-setting process involves determining how much work the workforce is expected to complete in a given time frame. This involves estimating the tasks to be completed, determining the time required, as well as factors such as complexity and quality. Workload standards help organizations optimize the use of human resources, improve efficiency, and get work done on time.

**Table 3.** Establishing Workload Standards (SBK)

It	Necessity	WKT	Average Time (Minutes)	SBK
1	Registration	109.440	1,9	57.600
2	Filling	109.440	1	109.440
3	Distribution	109.440	1	109.440
4	Retrival	109.440	3,65	29.983
5	Analytics	109.440	1,45	75.475
6	Coding	109.440	2	54.720
7	Assembling	109.440	1	109.440

The standard workload (SBK) obtained from the results of the calculation of Available Working Time (WKT) is 109,440 divided by the activity time norm, as seen in Table 4.3 SBK above, where the quantity of available working time (WKT) is divided by the time norm obtained a result of 57,600.

## 4. Setting The Standard Of Relaxation

A time standard is a time that has been set or considered a standard that must be achieved or followed in a certain process or activity. The standard time allocation of the medical record unit of the Wolio Health Center, which is 0.005, was obtained from the results of the calculation of the standard time allocation for activities such as meetings and training that are not directly related to the main operation.

**Table 4.** Setting the Standard of Relaxation

It	Facts of freedom	Average time	Available working hours	Average time	Workload standards
1	Monthly meetings	30 min/mo	109.440	360 min/yr	0,003
2	Training	300 min/yr	109.440	300min/yr	0,002
Sum					0,005

The data mentioned shows that the standard allowance for officers is 0.005, which is calculated by dividing the average time by the available working time.

## 5. Labor Calculation

**Table 5.** Labor Calculation

It	Main Activities	Quantity of main activities	SBK	Relaxation Standards	Power Requirements
1	Registration	8.529	57.600	0,005	0,15
2	Filing	8.529	109.440	0,005	0,08
3	Distribution	8.529	109.440	0,005	0,08
4	Retrival	8.529	29.983	0,005	0,28
5	Analysis	8.529	75.475	0,005	0,11
6	Coding	8.529	54.720	0,005	0,16
7	Assembling	8.529	109.440	0,005	0,08
	Sum				0,94

Based on the results of the staff needs assessment using the WSN method, which is 0.94 rounded to 1, then from the number of medical record officers at the Wolio Health Center, which currently number four or five people, one more person must be added.

## CONCLUSION

Researchers can draw the following conclusions based on the results of research that has been carried out on the calculation of the analysis of human resource needs of health medical record officers using the Workload Indicator Staff Need (WISN) method at the Wolio Health Center:

It is known that the WKT (available working time) is determined to be 260 days per year or 1,824 hours/year and 109,440 minutes/year. The determination is in accordance with 260 working days, 12 days of annual leave, 16 days of national holidays, and 3 days of absenteeism.

Determining the work unit and HR category, there are 4 officers with a D3 background in medical records and SKM

Setting workload standards such as registration 1.9 minutes, filling 1 minute, distribution 1 minute, retrieval 3.65 minutes, analysis 1.45 minutes, coding 1 minute, and assembling 1 minute. Setting the standard of relaxation there was a meeting of 0.003 minutes and training of 0.002 minutes and the result was 0.005

The calculation of the workforce of the Wolio Health Center requires one additional workforce

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