Workload Analysis of Medical Record Staff in a Primary Healthcare in Batusangkar Using Full Time Equivalent (FTE) Method

Ressa Oashttamadea

Department of Medical Record and Health Information Management, Apikes Iris, Padang, Indonesia

ABSTRACT

Workload is a number of work targets that must be achieved in a certain time unit, and workload analysis is necessary to determine how many employees are needed to summarize a job and how much burden is delegated to an employee. The aim of this study is to analyse the workload of medical record staff using Full Time Equivalent (FTE) method in Sakato Clinic, Batusangkar. This study was a descriptive case research with qualitative and quantitative approach, conducted in July 2020. Data was analyzed using Microsoft Excel, and this study found that the FTE index was 1.46. With 2 employees in medical record at the moment, the index should be 0.73 for each employee (underload). It is advisable that the director review the job description of medical record staff in the clinic so that the workload would be categorized as normal.

Keywords: workload, full time equivalent, medical record, management

INTRODUCTION

Human resource management (HR) is one of the areas of general management which includes aspects of planning, organizing, executing, and controlling in the field of employment. Employee planning is an important factor in organizational planning, second to identifying the position structure and determining the job description of each position in the organizational structure. Employee performance is one of the factors that influence the success of an organization or a company. With optimal performance and following the procedures, optimal results will also be obtained. The workload imposed on workers occurs in three conditions: normal workload, excessive workload (overload) and too low workload (underload). Workloads that are too heavy or too light will result in work inefficiency. Workload is a number of work targets or target results that must be achieved in a certain time unit, and workload analysis is an analysis that aims to determine how many employees are needed to summarize a job and how much burden is delegated to an employee. In determining the calculation of labor requirements, there is a need for consideration from the management to determine the need to match the workload carried out so as to increase work productivity and reduce the risk of employee fatigue.

The availability of human resources in the implementation of health services plays an important role, especially in the current era of Indonesia’s national health insurance carried out by Badan Penyelenggara Jaminan Sosial (BPJS). The BPJS program began to be implemented in Indonesia in 2014. The primary level of healthcare, called FKTP is the spearhead of...
health services in the community and has a function as the first healthcare facility for BPJS participants so that it has a major impact on improving public health status. According to Presidential Regulation Number 32 of 2014 concerning Management and Utilization of National Health Insurance Capitation Funds at Primary Level of Healthcare Facilities Owned by Local Governments, FKTPs are health facilities that provide non-specialized individual health services for the purposes of observation, diagnosis, treatment, treatment and/or other health services. Policy making in health is relied upon from the information system. Based on Health Minister Regulation No. 269/MENKES/PER/III/2008, it is explained that a medical record is a file containing notes and documents about the patient's identity, examination, treatment, actions, and other services that have been provided to patients. When viewed from the importance of medical records in health services, hospitals or health service providers should have health workers who are competent in their fields.

Sakato Clinic is a private primary healthcare (clinic) located in Batusangkar, a town in West Sumatera, that collaborates with BPJS and has a capitation number of 8,800 people, with an average visit of 85 patients per day in 2019. Until early 2020, Sakato Clinic does not have certified medical record personnel who manage the implementation of medical records according to standards. Currently, medical records tasks such as admission, filing and reporting are carried out by non-medical record health personnel such as nurses and midwives. In order to improve the quality of services in the field of health information management, it is necessary to carry out a workload analysis in order to meet the labor requirements, so the director can make a prediction on how many medical record personnel to hire.

Based on the explanation above, it is necessary to carry out "Workload Analysis of Medical Record Staff at A primary Healthcare in Batusangkar Using FTE (Full Time Equivalent) Method". Researchers hope that the results of this study will provide useful input for clinical development in the future, especially in the field of administering quality of medical records.

MATERIALS & METHODS

The design of this study was a descriptive case research with qualitative and quantitative approach. The study was conducted during July 2020 in Sakato Clinic, Batusangkar. Data were collected by means of observation, interviews, documentation. The qualitative study was conducted by interviewing 5 informants to indentify tasks in medical record aspect. Those 5 informants were director, 2 nurses and 2 midwives. The quantitative study was conducted by observation of efficient working hours to finish tasks; and documentation such as monthly reports, annual reports, and collecting data regarding to working hours and holidays. After documentation, all data was analized based on FTE method using Microsoft Excel with the following steps:

1. Observe and define the job description
2. Measure average time (in minutes) needed to finish each job description
3. Collecting data regarding working hours, working days, and holidays
4. Calculate workload using Microsoft Excel:

\[
FTE = \frac{\text{Activity Time} + \text{Allowance}}{\text{Working Time}}
\]

RESULT

Activity Time

The job description was collected based on interviews and observation, while the documentation such as patients visit was collected from Sakato Clinic’s 2019 annual report.
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Table 1. Calculating Activity Time

<table>
<thead>
<tr>
<th>Job Description</th>
<th>Time (Minute)</th>
<th>Quantity</th>
<th>Unit</th>
<th>Total Time (Minute)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient’s registration</td>
<td>2</td>
<td>24.807</td>
<td>Patient</td>
<td>49.614</td>
</tr>
<tr>
<td>Retrieving medical records</td>
<td>1</td>
<td>24.807</td>
<td>Patient</td>
<td>24.807</td>
</tr>
<tr>
<td>Taking medical records to doctor’s room</td>
<td>0.5</td>
<td>24.807</td>
<td>Patient</td>
<td>12.403.5</td>
</tr>
<tr>
<td>Inputting patient’s data</td>
<td>1</td>
<td>24.807</td>
<td>Patient</td>
<td>24.807</td>
</tr>
<tr>
<td>Assembling and filing medical records</td>
<td>2</td>
<td>24.807</td>
<td>Patient</td>
<td>49.614</td>
</tr>
<tr>
<td>Reporting</td>
<td>60</td>
<td>12</td>
<td>Month</td>
<td>720</td>
</tr>
<tr>
<td>Coordinating with health insurances</td>
<td>20</td>
<td>12</td>
<td>Month</td>
<td>240</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>162,205.5</strong></td>
</tr>
</tbody>
</table>

Total Working Time

Working time is analyzed by subtracting the national holidays set by Indonesian government from the number of days per month in 2019. The data is as seen in table below:

Table 2. Calculating Working Time

<table>
<thead>
<tr>
<th>Month</th>
<th>Working Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>26</td>
</tr>
<tr>
<td>February</td>
<td>23</td>
</tr>
<tr>
<td>March</td>
<td>25</td>
</tr>
<tr>
<td>April</td>
<td>24</td>
</tr>
<tr>
<td>May</td>
<td>25</td>
</tr>
<tr>
<td>June</td>
<td>19</td>
</tr>
<tr>
<td>July</td>
<td>27</td>
</tr>
<tr>
<td>August</td>
<td>26</td>
</tr>
<tr>
<td>September</td>
<td>25</td>
</tr>
<tr>
<td>October</td>
<td>27</td>
</tr>
<tr>
<td>November</td>
<td>25</td>
</tr>
<tr>
<td>December</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>296</strong></td>
</tr>
</tbody>
</table>

Working hours of Sakato Clinic was 12 hours (8AM – 8PM). Based on Table 2, the total working hours during 2019 was 296 days which equals to 3,555 hours or 213,120 minutes a year.

Allowance

Based on Kepmenpan No KEP/75/M.PAN/7/2004, the total allowance for employee is 30% of working hours, meaning the allowance during 2019 was 30% of 213,120 minutes, which equals to 149,184 minutes a year.

FTE Calculation

After calculating the activity time, total working time and allowance, workload analysis can be summarized by extracting into FTE formula:

$$FTE = \frac{Activity\ time + Allowance}{Total\ working\ time}$$

$$= \frac{162,205.5 + 149,184}{213,120} = 1.46$$

Based on the FTE calculation above, the workload was 1.46 which categorized as overload. In this case, Sakato Clinic has 2 medical record personnel who are placed in the medical records department. With the FTE index of 1.46; the workload of each health worker in the medical records department would be 0.73. Conditions like this have not been able to meet the normal workload index, namely 1-1.28, and it is advisable to the director of the Sakato Clinic to recompile the job description in the medical records department.

DISCUSSION

FTE is the method commonly used to regulate the effectiveness and efficiency of labor based on the required working time. FTE can be applied to calculate employee workload in all sectors, including the health sector. FTE method has been widely applied to calculate the need for medical personnel such as doctors or other health workers. According to Zekben, 2017, Full Time Equivalent is a time-based workload analysis method by measuring the length of time to complete the work and then converting it into an index of the FTE value. The method of calculating the workload with the Full Time Equivalent method where the time used to complete various jobs is compared to the available effective work time. FTE aims to simplify work measurement by changing working hours by changing working hours to the number of people needed to complete a particular job.6

Job analysis is the process of collecting and presenting information about a particular job with the aim of getting a bigger picture of the conditions for its implementation. This activity will analyze work activities, work context, work...
equipment, machines and other supporting tools used, how the work is done, personal needs for work and work relationships. Job analysis can also help the HR management department in determining achievement standards. Knowing the workload of an employee in one job or position, performance appraisal points can be formulated as performance standards. The higher the standard of achievement, the higher the rewards in general. In order to provide service fees, apart from being seen from the workload and performance appraisal, of course, you must also pay attention to the job specifications. But in general, it is not easy for organizations or companies to determine individual HR achievement standards.

When viewed from the importance of medical records in health services, hospitals or health service providers should have health workers who are competent in their fields. Based on the Minister of Health Decree No. 377/MENKES/SK/III/2007 regarding the professional standards of medical recorders and health information, medical recorders and health information are someone who has completed formal medical record education and health information so that they have competencies recognized by the government and the profession.

In a research conducted by Wardanis in 2018 about the job description of medical record personnel at the Surgical Hospital in Surabaya; medical record personnel were responsible for the assembly process, completeness of medical record files, returns and file borrowing, storage, confidentiality and file security as well as data accuracy which is used as a report by the hospital. The more the number of patients, the higher the workload of medical record personnel. The weakness of the FTE method performed with using a daily log is the process of filling the sheet. The daily log requires honesty so that it has minimal errors in doing workload calculations. To minimize this, filling the daily log would be even better if it was supported by simplifying the information system in the process of recording job descriptions, as well carried out communication and socialization to staff regarding the goals and benefits of workload analysis for planning and HR development in organizations. In another research by Lestari 2013 about the workload of medical record workers in Surakarta stated that based on the FTE index, it was stated that it was necessary to hold different counters for insurance and non-insurance patients so that the workload was evenly distributed.

Based on the workload analysis guidelines issued by the State Personnel Agency in 2010, an FTE index value above the value of 1.28 is considered overload, being between 1 and 1.28 is considered normal whereas if the FTE index value is between the values 0 to 0.99 is considered underload. In this research, the FTE index is 1.46. The medical record department in Sakato Clinic has 2 health workers (who are nurses), therefore the FTE index for each employee is 0.73. This result is categorized as underload, which is below 1. Aside from that, Sakato Clinic hasn’t collected statistical data about patients which is usually used by medical record professionals to report an epidemiology data, to describe top 10 diseases in a healthcare, and demography of the patients. It is necessary for the director to hire a professional in medical record with a proper diploma degree and revise the job description for each employee so that it would fit the standard.

CONCLUSION

The workload index of medical record staff at Sakato Clinic based on the FTE method is 1,46; and the health workers placed in medical record department were 2 employees, therefore the FTE index for each employee would be 0,73. The clinic needs some adjustment to fix the workload into normal, so the director would have to change the job descriptions in medical record department.
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REFERENCES

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