

## An Analysis Of Drug Planning Using ABC Index Method Critical In The Pharmacy Installation Public Hospital Royal Prima Marelan

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Article Info	ABSTRACT
<b>Keywords:</b> Drug Planning, Critical Index ABC Method, Pharmacy Installation.	Needs planning is an activity to determine the quantity and period of procurement of pharmaceuticals, medical devices and disposable medical materials in accordance with the results of selection activities to ensure that the criteria for the right type, right quantity, right time and efficiency are met. The purpose of the research is to analysed drug planning with ABC critical index method at the Pharmacy Installation of Royal Prima Marelan Hospital. Type This study is a combination of qualitative and quantitative research at the Pharmacy Installation at Hospital.Royal Prima Marelan. The qualitative sample of the study was 3 people and the data source was the drug needs plan. The research instrument used a questionnaire. The results of this study with ABC analysis of the critical index value of group A usage were 30 items (51%), group B obtained 23 items (39%) and group C obtained 8 items (9%). Based on the calculation with ABC analysis of the critical index of investment value, group B obtained 2 items (3%) of the total items and group C obtained 57 items (97%) of the total items in the Pharmacy Installation. Based on the calculation with ABC analysis of the critical index of investment value, group B obtained 2 items (3%) of the total items and group C obtained 57 items (97%) of the total items in the Pharmacy Installation. The results of qualitative research on drug planning at the Pharmacy Installation of Hospital. Royal Prima Marelan used the consumption method, namely looking at the average use of drugs in the previous 3 months, at the time of service there were still frequent stock outs of drugs. It is necessary to prepare and evaluate a drug requirement plan (RKO) which is carried out every month as a basis for planning drug requirements and/or can use methods to analysed drug requirements that are efficient, effective and appropriate.
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### INTRODUCTION

A hospital is a health service institution that provides health services. individual in full which provides inpatient, outpatient, and emergency services (Minister of Health Regulation No. 58 of 2014). While According to WHO (World Health Organization) Health Organization), a hospital is an integral part of a social and health organization that has the function of

providing comprehensive services, curing diseases and preventing diseases to the community.

Hospitals as health service organizations are entering a competitive and ever-changing global environment. The hospital sector in Indonesia is developing towards a business institution so that hospital management needs to consider economic principles, without having to eliminate its social function. Among the logistics supplies owned and managed by hospitals, drugs and pharmaceutical materials are the logistics supplies that have the largest portion in terms of procurement (Charles, Hospital Pharmacy Theory & Application 2003).

In the Regulation of the Minister of Health of the Republic of Indonesia Number 72 concerning pharmaceutical service standards in hospitals, it defines needs planning is an activity to determine the amount and period of procurement of pharmaceuticals, medical devices and disposable medical materials in accordance with the results of the selection activities to ensure the fulfillment of the criteria of the right type, right amount, right time and efficiency. In order to optimize pharmaceutical services in hospitals, good pharmaceutical logistics management is needed including the stages of planning, procurement, storage, distribution, disposal, evaluation and monitoring which are interrelated with each other.

Drug needs planning is carried out every certain period with the aim of bringing planning calculations closer to real needs and must use a method that can be accounted for in order to avoid drug shortages and ensure drug availability. ABC Critical Index is one of the drug needs planning methods, namely a method that can see the level of drug criticality which includes calculating the amount of use, investment value and level of criticality to patient care. The ABC Critical Index method can help hospitals plan drug use by considering the value of use, investment value and criticality value of the drug, which can then be used as a basis for determining the drug formulary policy which will be a reference for doctors in providing therapy (Riginari, 2022).

In accordance with Law Number 24 of 2011 concerning Social Security Administering Agency (BPJS), since January 2014 BPJS Kesehatan has started operating to organize National Health Insurance (JKN). National Health Insurance is a state program that aims to provide certainty of protection and social welfare for all Indonesian people, as well as Hospital. Royal Prima Marelán since November 1, 2021 has participated in organizing JKN.

The breadth of services and participation of Hospital. Royal Prima Marelán in JKN demands efficient management of pharmaceutical supplies. The implementation of JKN also changes the pattern of drug consumption which is guided by the national formulary, seen in the number of patient visits which tend to increase in the last 3 months, namely the number of prescriptions in June 1,411 total prescriptions, in July 1,064 total prescriptions and in August 1,360 total prescriptions of the Pharmacy Installation of Hospital. Royal Prima Marelán.

Based on the initial survey conducted, it is known that the list of hospital drug formularies has not been updated regularly, the last update was carried out in 2020. It is known that the types of drugs used are not fully in accordance with the latest national formulary decision list, so that the function of the national formulary for the efficiency of pharmaceutical inventory management is still less than optimal. In addition to being the main guideline

for doctors in providing therapy to patients, the usefulness of the national hospital formulary is also to provide a high benefit ratio not just cost reduction.

Then based on the interview results it was also found that, currently the Pharmacy Installation of Hospital Royal Prima Marelan in planning drug purchases still makes manual orders to drug distributors and requires a long and lengthy process, this can be at risk of drug shortages in the Pharmacy Installation, in addition to that for supply planning until now using the planned consumption method each month based on average consumption data for the previous 3 (three) months. If there is a shortage or a request for a Doctor's prescription, a direct order will be made, confirmation to the Doctor or the patient will be given a drug prescription and of course this will affect the patient's service and treatment process.

A Hospital Royal Prima Marelan, which has been operating since 2020 and provides 24-hour pharmacy services, has not yet implemented a drug planning method through the ABC Critical Index to facilitate planning, especially based on priorities in terms of usage and investment value. This needs to be done considering the increasing amount of Hospital Royal Prima Marelan's Pharmacy spending. With the analysis of the ABC critical index method, it is hoped that it can provide an overview of drug needs in the Hospital Royal Prima Marelan Pharmacy Installation, both in terms of economic aspects and also medical aspects.

## **Literature Review**

### **Definition of Hospital**

Hospital according to the Regulation of the Minister of Health of the Republic of Indonesia Number 4 of 2018 is a health service institution that organizes comprehensive individual health services that provide inpatient, outpatient and emergency services. A hospital is an organization carried out by professional staff who are well organized from medical facilities and infrastructure, continuous nursing care, diagnosis and treatment of diseases suffered by patients (Supartiningsih, 2017).

Hospital is a professional health institution whose services are provided by Doctors, Nurses and other Experts. In the Hospital there are many activities and events that take place in a related manner (Haliman and Wulandari 2012).

### **Hospital Duties and Functions**

Hospitals have duties and functions based on Law No. 44 of 2009 concerning Hospitals. The task of the hospital is to carry out health service efforts, in a data-based and effective manner by prioritizing healing and recovery which is carried out officially and integrated with the improvement and prevention and implementation of referral efforts, the hospital also has the task of providing complete individual health services. Meanwhile, the functions of the hospital are:

1. Provision of health treatment and recovery services in accordance with hospital service standards
2. Maintaining and improving individual health through comprehensive second and third level health services according to medical needs.
3. Human resource education and training services to improve capabilities in providing health services

4. Implementation of research and development as well as screening of health technology in order to improve services by paying attention to the ethics of health science.

### **Hospital Classification**

According to the Regulation of the Minister of Health of the Republic of Indonesia Number 56 of 2014 there are two types of hospitals:

1. General hospitals are hospitals that provide health services in all areas and types of diseases.
2. A specialized hospital is a hospital that provides primary services in one field or one specific type of disease based on scientific discipline, age group, organ, type of disease or other specializations.

General hospitals have a mission to provide quality and affordable health services to the community in order to improve the health of the community. The task of general hospitals is to carry out health service efforts in an efficient and effective manner by prioritizing healing and recovery which are carried out in a harmonious and integrated manner with improvement and prevention and implementation of referral efforts. In the Regulation of the Minister of Health of the Republic of Indonesia in 2019, based on its class, general hospitals are categorized into 4 classes starting from A, B, C, D. Where the differences between the four classes are as follows:

- a. Buildings and infrastructure
- b. Service capabilities
- c. Human Resources
- d. Equipment

### **Hospital Pharmacy Installation (IFRS)**

A hospital is a health service institution that organize comprehensive individual health services that provide inpatient, outpatient, and emergency services. Hospitals are organized based on Pancasila and are based on humanitarian values, ethics and professionalism, benefits, justice, equal rights and anti-discrimination, equality, protection and patient safety, and have a social function. Hospitals have the task of providing comprehensive individual health services (Regulation of the Minister of Health of the Republic of Indonesia No. 72 of 2016).

Hospital Pharmacy Installation can generally be interpreted as a department or unit or part of a hospital under the leadership of a pharmacist and assisted by several pharmacists who meet the applicable legal requirements and are responsible for all pharmaceutical work, which consists of complete services including planning, procurement, production, storage of health supplies or pharmaceutical preparations, dispensing of drugs based on prescriptions for patients while in-patient or outpatient, quality control and control of distribution and use of all health supplies in the hospital.

In the Minister of Health's Decree Number 44 of 2009 concerning Hospitals, pharmaceutical requirements must guarantee the availability of quality pharmaceutical preparations and medical devices useful, safe and affordable. Pharmaceutical preparation services in hospitals must follow pharmaceutical service standards. Management of medical devices, pharmaceutical preparations, and consumables in hospitals must be carried out by a one-

stop pharmacy installation. The price of pharmaceutical supplies at the hospital pharmacy installation must be reasonable and based on the benchmark price set by the government.

### **Analysis of ABC Critical Index Method**

The ABC Critical Index method can help hospitals plan drug use by considering the usage value, investment value and criticality value of the drug, which can then be used as a basis for determining the drug formulary policy that will be a reference for doctors in providing therapy (Prisanti, 2019). The ABC critical index method is a method developed by the University of Michigan Hospital, this method can see the level of drug criticality which includes calculating the amount of use, investment value and level of criticality to patient care in an index number, which will be used to determine inventory with the ABC category, so that the process supervision and control are more assured.

## **METHODS**

This type of research is a combination of qualitative and quantitative research at the Pharmacy Installation at RSU. Royal Prima Marelán. According to Sugiyono, 2017 the combination research method is a research method that combines or combines quantitative and qualitative methods to be used together in an activity. Primary data consists of drug usage data, drug names and drug prices used in the Pharmacy Installation based on the drug needs plan or the hospital's national formulary, where the inventory group that uses the most investment and usage will be known as well as the results of the interview.

This research was conducted at the Pharmacy Installation of Royal Prima Marelán Hospital. The selection of the location of this research was based on the consideration that drug planning with the ABC method of critical index at Royal Prima Marelán Hospital has never been done. The research population is divided into two, namely:

1. Informants/resources for the interview consisted of 3 people, namely the Deputy Director of Medical and Nursing Services, Head of the Pharmacy Installation and Assistant Pharmacist of the Pharmacy Installation of Royal Prima Marelán Hospital.
2. The population of this research data is drug planning data at the Pharmacy Installation of Royal Prima Marelán Hospital in the form of a drug requirement plan for Royal Prima Marelán Hospital which can be used as a reference and information in the ABC critical index planning process. In September 2022, the disordered drug requirement plan was 190 types.

According to Sugiyono, 2016, a sample is a portion of the number and characteristics possessed by a population, while the sampling technique is called sampling. The sampling technique in this study is total sampling. Total sampling is a sampling technique where the number of samples is the same as the population. In this study, the sampling technique used is total sampling because it uses all the data in the drug needs plan data of the Pharmacy Installation of Royal Prima Marelán Hospital.

The research instruments include document studies in the form of drug planning which are useful for analysis materials based on the ABC Critical Index method and interviews. The data used in this study consists of primary data and secondary data. Primary data was obtained through interviews with pharmacists/head of pharmacy installation. Sec-

ondary data was obtained by tracing data and documents.can be in the form of drug requirement plan data, national hospital formulary at Hospital Royal Prima Marelan. Data analysis was carried out with the following steps.

1. Calculating usage value
  - a. Calculating total drug usage
  - b. Drug usage data is grouped based on the amount of use. Sorted from the largest to the smallest usage.
  - c. Group A with 70% of total drug use
  - d. Group B with 20% of total drug use
  - e. Group C with 10% of total drug use.
2. Calculating investment value
  - a. Calculating the total investment for each type of drug
  - b. Grouped by investment value of drugs. Sorted from the largest investment value to the smallest
  - c. Group A with an investment value of 70% of the total drug investment
  - d. Group B with an investment value of 20% of the total drug investment
  - e. Group C with an investment value of 10% of the total drug investment.
3. Determining the critical value of drugs
  - a. Developing critical value criteria for drugs
  - b. Conducting focus group discussions with pharmacists/head of pharmacy installation to obtain critical drug values, with criteria that have been determined based on national formulary data that has been determined by the hospital. From the focus group discussion, an analysis was carried out using the following steps: as follows.
    1. Make an average score for each type of drug.
    2. Arrange the drug table from highest score to lowest score.
    3. Check cumulative percentage (%)

The critical value criteria for drugs are:

- a. Group X or vital drug group, is a vital group to prolong life, to treat diseases that cause death or for basic health services. This group must not be empty.
- b. Group Y or essential drug group is a causal drug, namely a drug that works on the source of the disease, pharmaceutical logistics that are widely used in the treatment of most diseases. The emptiness of this group of drugs can be tolerated for less than 48 hours.
- c. Group Z or non-essential drug group, is a supporting drug to make the action or treatment better, for comfort or to overcome complaints. The emptiness of this group of drugs can be tolerated for more than 48 hours.

## RESULT

### Quantitative Research Results

Through analysis of drug planning data for December 2022 at the Pharmacy Installation of Royal Prima Marelan Hospital. The ABC grouping of usage values is as follows:



**Table 1** Grouping of Drugs based on ABC Usage Value

Group	Amount Usage	Presentation Usage	Number of Drug Items	Presentation Medicinal Items
A	29072	61.71%	30	51%
B	13706	29.09%	23	39%
C	4326	9.20%	6	9%
Amount	47104	100%	59	100%

The results of the ABC analysis calculation of the usage value obtained group A as many as 30 items (51%) of the total items in the Pharmacy installation of RSU. Royal Prima Marelan with a usage of 29072 (61.71%) of the total usage. Group B obtained 23 items (39%) of the total items in the Pharmacy Installation with a usage of 13706 (29.09%) of the total usage. Group C obtained 8 items (9%) of the total items in the Pharmacy Installation with a usage of 4326 (9.20%) of the total usage.

#### Drug Grouping Based on ABC Investment Value

Through analysis of drug planning data for December 2022 at the Pharmacy Installation of Royal Prima Marelan Hospital. The ABC grouping of investment values is as follows:

**Table 2.** Grouping of Drugs based on ABC Investment Value

Group	Amount Investment	Presentation Investment	Number of Items Drug	Percentage Medicinal Items
A	Rp. 0	0%	0	0
B	Rp. 518,928,474	70.58%	2	3%
C	Rp. 216,246,585	29.42%	57	97%
Amount	Rp. 735,175,059	100%	59	100%

From the results of the ABC analysis, the investment value obtained in group B was 2 items (3%) of the total items in the Pharmacy Installation with an investment of Rp 518,928,474 (70.58%) of the total investment. Furthermore, group C was 57 items (97%) of the total items in the Pharmacy Installation with an investment value of Rp 216,246,585 (97%) of the total investment. While in group A there were no drug items invested in the Pharmacy Installation of RSU. Royal Prima Marelan because none covered 70% of the drug investment value.

#### Grouping of Drugs Based on ABC Critical Value of Drugs

Through analysis of drug planning data for December 2022 at the Pharmacy Installation of Royal Prima Marelan Hospital. The ABC grouping of critical drug values is as follows:

**Table.3.** Grouping of Drugs based on ABC Critical Drug Values

Group	Critical Value Percentage	Number of Drug Items
Vital	34%	20
Essential	49%	29
Non-Essential	17%	10
Amount	100%	59

The vital group was 20 (34%) drug items from the total. drug items, essential group as many as 29 (49%) of the total drug items and non-essential group as many as 10 (17%) of the total drug items in the Pharmacy Installation of Royal Prima Marelان Hospital.

#### Drug Grouping Based on ABC Critical Index Value

Through analysis of drug planning data for December 2022 at the Pharmacy Installation of Royal Prima Marelان Hospital. The ABC grouping of critical index values is obtained as follows:

**Table 4** Grouping of Drugs Based on ABC Critical Index Value

Group	NIK Presentation	Number of Drug Items
A (9.5 - 12)	32%	19
B (6.5 - 9.4)	44%	26
C (4 - 6.4)	24%	14
Amount	100%	59

Grouping of drugs based on the ABC critical index is used to improve the efficiency of fund use, especially for drugs based on their impact on health (Adisasmito, 2006). There are 29 types of drugs (32%) included in group A critical index. Drugs in group A include drugs that need attention in procurement because they have high use value and high criticality value because their use cannot be postponed so that there should be no shortage.

#### Qualitative Research Results

Informants about drug needs planning in this study are based on qualitative analysis of a number of open questions that have been prepared information about all questions from informants in the Pharmacy Installation of Royal Prima Marelان Hospital. The results of the study can be described based on the composition of the questions as follows:

1. How does the drug planning system work in the Pharmacy Installation?

The results of in-depth interviews on the drug planning process at the Pharmacy Installation of Royal Prima Hospital can be described as follows:

*"the drug planning system with RKO (drug requirement plan) which is provided every month by the Head of the Pharmacy Installation"(Informant 1)*

*"the planning system is based on the average use of drugs in the previous three months"(Informant 2)*

*"For drug planning in the Royal Prima Marelان Hospital pharmacy installation, we are in accordance with the RKO. Well, RKO is a drug requirement plan, we can determine RKO from the amount of drug usage for each item from the previous month. So for planning drug requirements for next month, we can calculate from the previous estimate" (Informant 3)*

Based on the results of the interview above, it can be concluded that the drug planning system in the Pharmacy Installation of Royal Prima Marelان Hospital is based on the average usage of the previous 1-3 months, the calculation used is manual calculation by the pharmacist of the pharmacy installation.

2. How to determine the type, quantity and time of ordering drugs?



The results of in-depth interviews on determining the type, quantity and time of drug orders at the Pharmacy Installation of Royal Prima Hospital can be described as follows:

*"The type, quantity and time of ordering the medicine is based on the needs... based on the amount of stock available, if later the amount of stock has decreased then we will make an order... but the order is still based on the RKO (drug requirement plan) that we have determined at the beginning"*(Informant 1)

*"usually the type is according to the hospital formulary and the amount is according to previous use and the time of ordering each month"* (Informant 2)

*"to determine the type, quantity and also the time of the order... for the type and quantity are the same as the previous usage, now for the time of the order it is not determined on what day and when but is adjusted to the needs"*(Informant 3).

Based on the results of the interview above, it can be concluded that determining the type, quantity and time of ordering is based on the planned drug needs that are ordered every month and adjusted if the stock is out during the service then a purchase will be made, this reflects that in planning drug needs, it is better to plan safety stock for drugs in the Pharmacy Installation of Royal Prima Marelan Hospital.

3. What obstacles occur in the Pharmacy Installation in planning medicines?

The results of in-depth interviews on what obstacles occurred in the Pharmacy Installation in planning medicines at the Pharmacy Installation of RSU. Royal Prima Marelan can be described as follows:

*"The calculation of the drugs is still done manually and it is quite difficult to adjust the schedule between pharmacy and finance to carry out stock taking every three months."*(Informant 1)

*"The problem is the limitations of the hospital system... so the system calculations are still manual"*(Informant 2)

*"Well, if there are obstacles in planning medicines, sometimes we, as pharmaceutical installations, of course have to join or collaborate with several principals, so it just so happens that there is a medicine that we want to plan to order, it just so happens that the principal we are collaborating with is out of stock or indeed there is no distribution permit or extension.*

*permission or various reasons, well, there are obstacles, so to solve the problem, we usually confirm it with management, we can order from someone else, or we can switch medicine A to medicine B but with the same indications."*(Informant 3)

Based on the results of the interview above, it can be concluded that the obstacle in drug planning at the Pharmacy Installation of Royal Prima Marelan Hospital is the hospital system that does not yet support pharmacy services. The system currently available cannot produce data on the calculation of usage, sales and remaining stock. This results in calculations still being carried out manually at the Pharmacy Installation of Royal Prima Marelan Hospital.

4. What obstacles are found in service units/installations with the current system?

The results of in-depth interviews on the obstacles found in the Pharmacy Installation of Royal Prima Marelán Hospital with the current system can be described as follows:

*"With the current system, the problem is that there is often a buildup of prescriptions in outpatient pharmacy prescriptions, which makes patients feel like they are taking a long time to get their medication."*(Informant 1)

*"For outpatients, prescriptions always pile up, so patients always complain about taking a long time to receive their medication. For inpatients, requests for medication outside the hospital formulary often occur."*(Informant 2)

Based on the results of the interview above, it can be concluded that the obstacle during the service at the Pharmacy Installation of Royal Prima Marelán Hospital is that there is still one door for outpatient and inpatient services so that there is often a backlog of prescriptions and the risk of causing patient complaints. Other obstacles also mentioned

There are still some doctors who prescribe drugs that are not in accordance with the hospital formulary. This results in the drugs available in pharmacies becoming slow moving.

5. Does the Pharmacy Installation of RSU. Royal Prima have safety stock? The results of an in-depth interview on whether the Pharmacy Installation of RSU. Royal Prima Marelán has safety stock can be described as follows:

*"There is safety stock... for emergency medicines"*(Informant 1)

*"No.. we don't have any because of limited pharmacy warehouse"*(Informant 2)

*"For safety stock, there should be, but because we are still under one door, inpatient and outpatient are combined, sometimes in the field it is not appropriate because we cannot be sure of the patients today, sometimes it is busy tomorrow, so our estimate of safety stock is appropriate, but it turns out that tomorrow the patients are overflowing... so we don't have it yet"*(Informant 3)

Based on the results of the interview above, it can be concluded that the Pharmacy Installation of RSU. Royal Prima Marelán does not yet have a safety stock, this is in accordance with the frequent occurrence of stock outs and retail purchases because RSU. Royal Prima Marelán does not yet have a safety stock. Drug planning using the ABC method can provide an overview of drugs whose use is included in the high group as a reference for the safety stock of the Pharmacy Installation of RSU. Royal Prima Marelán.

#### **Analysis of drug grouping using ABC Investment Value**

The results of the ABC analysis of use value show that the percentage composition of drug items in groups A, B, and C is directly proportional to the percentage of their use. The calculation results also show that group C with drug use of 9.20% indicates that drugs with slow moving use appear to have less use value so that it will make it easier for pharmacists to monitor drugs that are at risk of expiring, based on the results of drug planning interviews at the Pharmacy Installation of Royal Prima Marelán Hospital is carried out using a method using an average of 1 to 3 months previously, but in its implementation the planned drugs are not included in the safety stock. This calculation can be used to select which drug items really need to be held and which do not need to be held again. The results of the ABC

calculation of the critical index of use value can be one of the bases for drug planning and its safety stock at the Pharmacy Installation of Royal Prima Hospital in order to minimize stockouts.

The results of the ABC analysis calculation of investment value show the composition the percentage of group B items that have the highest investment presentation value high with a coverage of 70.58% with a drug presentation of only 3% in contrast to group C which has a drug presentation value of 29.42% with a drug presentation of 97%. Drugs included in group B are drugs that are included in the 70% usage value or fast moving. In group C, it absorbs 29.42% of investment with a drug presentation of 97%, thus it is necessary to make arrangements in inventory and planning in order to prevent stock accumulation because drugs with high investment values also incur high storage costs.

### Analysis of drug grouping using ABC Critical Index Value

The drugs included in critical index group A are as follows:

**Table 5.** Grouping of Drugs Based on ABC Critical Index Value

No.	Drug Name	Mark Use	Mark Investment	Index Critical	NIK	Group
1	Furosemide 40 Mg Tablet	3	1	3	10	A
2	Glibenclamide 5 Mg Tablets (Renabetic)	3	1	3	10	A
3	Rilox-400 Tablet	3	1	3	10	A
4	Nitrocaf Retard	3	1	3	10	A
5	Ringer Lactate 500 MI Satoria	3	2	3	11	A
6	Ampicillin Tablet	3	1	3	10	A
7	Fentanyl 0.05 Mg/MI 2ml Injection	3	1	3	10	A
8	Nacl 100 MI Satoria	3	1	3	10	A
9	Bisoprolol Fumarate 2.5 Mg Tablets	3	1	3	10	A
10	Dumin Rectal 250 Mg/4 MI	2	1	3	9	A
11	Ephedrine Injection	2	1	3	9	A
12	Lasal Nebule 2.5 Mg	2	1	3	9	A
13	Ceftriaxone 1 Gr Injection	2	1	3	9	A
14	Metronidazole Infusion	2	1	3	9	A
15	Nacl 500 MI Satoria	2	1	3	9	A
16	Cefxon Injection	2	1	3	9	A

These nineteen drugs are among the drugs that need attention. in procurement because it has high use value and investment value, as well as also has a high level of criticality due to its use which cannot be postponed so that there are no vacancies or stockouts. Thus supervision of this critical index group needs to be carried out strictly so that patients can get optimal service.

### Qualitative Analysis Discussion

Planning for drug needs is certainly inseparable from the analysis of problems and conditions in the hospital, including the drug planning system in the Pharmacy Installation of RSU. Royal Prima Marelan based on the results of interviews with 3 informants that have been carried out that drug planning uses the consumption method, namely looking at the average use of drugs in the previous 3 months. One of the obstacles in this case is still using

a manual method to calculate previous use, because Hospital Royal Prima Marelan has not used a hospital system in calculating drug stock. It is feared that using a manual method can result in a poor documentation process. With poor data documentation, it can later result in inaccurate and selective calculation results. In fact, the results of the data calculation are very much needed to prepare a plan for further needs.

Good drug needs planning will have implications for the efficiency of the budget that has been prepared by the hospital. Safety stock is an extra stock that is carried out to anticipate the element of demand fluctuations. The use of safety stock is usually only used in emergency conditions to minimize retail purchases, but at Hospital Royal Prima Marelan there is no drug safety stock based on the results of the interview, this is feared to result in retail purchases that will prolong patient services and increase purchasing costs, by using the drug planning method and supported by valid data, safety stock can be implemented to improve the quality of service of the Hospital pharmacy installation. Royal Prima Marelan.

## CONCLUSION

Based on the research that has been conducted, there are conclusions that can be drawn from the results of this research, namely: The process of planning drug needs at RSU. Royal Prima Marelan is still not in accordance with the guidelines for managing drugs and supplies recommended by the Ministry of Health relating to the planning process using an average usage system of 1-3 months, but in its implementation there are still stockouts and safety stock drugs that are not found. Based on calculations using ABC analysis, the critical index value of group A usage was 30 items (51%), group B obtained 23 items (39%) and group C obtained 8 items (9%). Based on calculations using ABC analysis of the critical investment value index, group B obtained 2 items (3%) of the total items and group C obtained 57 items (97%) of the total items in the Pharmacy Installation. Based on calculations using ABC analysis of the critical index, the critical index value is the vital group of 20 (34%) drug items from the total number of drug items, the essential group of 29 (49%) from the total number of drug items and the non-essential group of 10 (17%).

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