# **Procurement Process of Goods and Dental Polyclinic Unit** Space Batang Hospital in the Era of the Covid 19 Pandemic (Case Study)

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#### **Abstract**

The implementation of the procurement of medical devices and the layout of the dental polyclinic unit is an important factor in supporting health service efforts. Procurement of medical equipment and spatial planning requires additional budget, this is due to adjustments that must be carried out by the dental polyclinic unit of Batang Hospital. The purpose of this study was to determine the process of implementing procurement of goods and adjusting the layout of the dental polyclinic unit of the Batang Regional General Hospital in the Covid 19 pandemic era. Method: The study used a qualitative method (case study). The research subjects were employees of RSUD Batang totaling 7 respondents and 2 respondents triangulation with total sampling technique. Data analysis using a qualitative interactive model Research Results: The implementation of the proposal, planning, budgeting, procurement and spatial adjustment of the dental polyclinic unit has been going well and in accordance with the procedure, although it is not perfect as for the need for proposing medical equipment, it is not fully in accordance with the needs of the dental clinic. Barriers to procurement of goods and adjustments to the layout of the dental polyclinic unit are caused by limited budgets or not in accordance with realization, so that the proposed needs are considered according to a priority scale. The risk of procurement of goods and adjustments to the layout of the dental polyclinic unit that has not been fulfilled, the management is responsible in this case to reduce the risk by providing level 3 PPE, vaccines and other forms of protection with assistance. Conclusion: The process of implementing the procurement of goods and adjusting the layout of the dental polyclinic unit of the Batang Regional General Hospital in the era of the Covid 19 pandemic has been going well and not fully in accordance with the needs of the user/dentist.

Keywords procurement of dental health equipment; obstacles; risks

### I. Introduction

The hospital is one of the health facilities to provide health services to the community and has a very important role in accelerating the improvement of public health status (1). The process of purchasing medical devices is an effort by the hospital logistics management team to fulfill requests for purchasing medical devices in order to improve the quality of dental health services during the Covid-19 pandemic.

Based on information on the procurement process for goods and the dental poly room at the Batang Hospital in July 2020, the procurement of medical device management and spatial planning for the Dental Poly unit at Batang Hospital in the era of the COVID-19 pandemic has not been completed. Dentist services on the Adaptation of New Habits from

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the Ministry of Health of the Republic of Indonesia, in the field of dentistry services. Recently, there has been a lot of attention on hospital management issues, this is related to the procurement of goods and space according to the Covid-19 guidebook at the Dental Polyclinic Unit of Batang Hospital, which has not been carried out in accordance with the provisions. The process of implementing the procurement of medical devices from program planning (input) is related to the source of funds, where the allocation of funds comes from the APBD and APBN. The input process will affect every process of implementing the procurement.

Medical equipment management aims to ensure that the equipment used for patient care is safe, available, accurate, and affordable. WHO's strategic objective in medical equipment management is to ensure increased accessibility and quality of medical technology (2). The Health Law of the Republic of Indonesia Number 36 of 2009 stipulates that medical personnel provide medical equipment, and the provision of equipment by regional health centers depends on the quality of medical services provided, including patient satisfaction, which has a major impact (3). Therefore, the equipment must be in good condition, the installation of medical devices in good condition and functioning properly, and able to support medical services. To achieve this, good management is needed, especially in the planning section starting from human resources, equipment, infrastructure, costs/budgets and economic needs for procurement.

It is known that there is currently an outbreak of a new disease originating from a virus, namely the corona virus, which is a large family of viruses that cause disease that starts from mild to severe symptoms. Corona virus infection has signs and symptoms including fever, cough and shortness of breath. In severe cases it can cause lung inflammation, acute respiratory distress, kidney failure and death. The State of Indonesia reported the first case of Covid-19 on March 2, 2020 and the number continued to increase until June 30, 2020 (4), the Ministry of Health reported 56,385 confirmed cases of Covid-19 with 2,875 cases of death (CFR 5.1%) spread across Indonesia. 34 provinces.

The outbreak of this virus has an impact of a nation and Globally (Ningrum *et al*, 2020). The presence of Covid-19 as a pandemic certainly has an economic, social and psychological impact on society (Saleh and Mujahiddin, 2020). Covid 19 pandemic caused all efforts not to be as maximal as expected (Sihombing and Nasib, 2020).

One of the impacts of the pandemic is that people are afraid of regular dental treatment and choose to self-medicate. Dentists and dental nurses in hospitals are also worried about performing dental procedures because of the high risk of transmission and virus contamination. To prevent transmission, protect officers and patients during the Covid-19 pandemic, health care facilities also prepare all available resources and make adjustments to the service space as needed.

The implementation of the procurement of medical equipment and the layout of the dental poly unit is an important component in supporting health service efforts. As explained in the Law of the Republic of Indonesia Number 44 of 2009 a hospital can guarantee the availability of medical devices, the availability of equipment by the hospital greatly affects the quality of health services provided, including patient satisfaction. Procurement of medical devices with good function or condition requires good management efforts (5). Efforts to realize good medical devices need to be maintained in detail and in accordance with applicable fixed procedures in accordance with existing provisions (6).

The COVID-19 pandemic requires adjustments to be available in the dental poly unit. Due to the coordination of the Dental Poly unit at Batang RSUD Batang, an

additional budget is needed for the purchase of medical devices and land use planning. The problems faced by the Dental Poly unit at Batang RSUD are, among others, in terms of planning needs, where the budget costs set are not as expected so that the need for medical equipment and the spatial planning of the Dental Poly unit cannot be met properly so that the existing medical equipment and layout are said to be inadequate or do not meet the standards of health services in the field of dentistry. Another obstacle is the procurement of medical devices and the adjustment of the layout of the Dental Poly unit, at the beginning of the Covid-19 pandemic in March - April 2020 already submitted medical devices including Air Ex tractor (Exhaust fan), extra oral / portable HVE, but in November it was only released for extra oral / portable HVE, while for Air Extractor (Exhaust fan) and HEPA filter until 2021 it has not been realized or has not been fulfilled (Source: RSUD Trunk, 2021). The need for medical equipment and room management for the Dental Poly unit should be equipped to support the smooth running of the services provided. Minimal equipment and room adjustments that do not meet these standards greatly affect the quality of services provided, including the waiting time for patients to be quite long. Another impact is that when medical equipment is not adequate enough and the layout does not meet the standards, it will be very risky for health workers, patients, dentists and dental nurses who are very at risk of contracting the Covid-19 virus so that the impact on health services is not optimal. Hospitals always start with investments in the form of policies (SOP), Human Resources, facilities, financing and infrastructure planning and focus on supporting each component of the procurement process and improving logistics and managing the provision of medical devices. The purpose of this study was to determine the process of implementing the procurement of goods and adjustments to the Spatial Planning of the Dental Poly Unit at the Batang Regional General Hospital.

#### II. Research Method

The research method used in this research is descriptive observational with cross sectional design. The research population was Batang Hospital employees, totaling 7 respondents and 2 triangulation respondents who were adjusted to the objectives and inclusion and exclusion criteria. The sampling technique used was total sampling. Data from in-depth interviews that have been collected are then analyzed using a qualitative interactive model.

### III. Results and Discussion

### 3.1 Results

### **Characteristics of Respondents**

Based on the respondent search process, this study found 7 respondents and 2 triangulations were employees of the Batang Regional General Hospital who were directly involved in the process of procuring medical equipment and adjusting the layout of the dental poly unit. Respondents in this study have been willing to join to provide information in this study. Respondents were selected based on the inclusion and exclusion criteria that had previously been set by the researcher. Researchers conducted in-depth interviews, while the characteristics of the informants were described in more detail as follows:

**Table 1.** Characteristics of Respondents

No	Name	Gender	Age	Length of Duty	Position
1	TH (Responden 1)	L	59	1,5 year	Director
2	EB (Responden 2)	P	48	2 year	Head of Section for medical and non-medical services, as well as serving as PPTK
3	R (Responden 3)	P	38	10 year	Commitment Making Officer
4	EY (Responden 4)	P	44	10 year	Procurement officer
5	NA (Responden5)	P	42	21 year	Planning and Finance
6	MLP (Responden	L	30	2 year	PJ PHP Technical Team
	6)				
7	D (Triangulation)	P	31	8 Month	Dentist
8	I (Triangulation)	P	50	10 Month	Head of Service and Support

#### 3.2 Discussion

# a. Process of Procurement of Medical Devices and Adjustment of Spatial Planning for Dental Polyclinic

Based on the results of the research, it is known that the process of proposing medical devices and adjusting the layout of the dental clinic through various stages, such as after the proposal is approved, it is then included in the Business Plan and Budget (RBA) and carried out with standard Operating Procedures (SOP) and involves all units such as dentists, management, Head of Section for medical and non-medical support, Medical Electrical Engineering (AKTEM) experts

# b. Planning Process for Medical Equipment Procurement and Adjustment of Dental Polyclinic Layout

The results of the research on the planning process of medical devices and the spatial adjustment of the dental polyclinic at Batang Hospital were carried out according to the budget, if in planning the procurement of medical devices there were not fulfilled it would be proposed again in the following year. Planning for the procurement of medical devices in Batang Hospital is carried out by selecting a direct appointment provider through Epurchasing / E Catalog and Health Technology Assessment

# c. The Process of Budgeting Medical Devices and Adjusting the Layout of the Dental Polyclinic

The process of budgeting medical devices and adjusting the layout of the dental polyclinic goes through the stage of identifying needs by the supporting section. Then forwarded to the Technical Activity Making Officer (PPTK) to carry out budgeting for the purchase of medical devices. The sources of revenue for Batang Hospital come from the Regional Public Service Agency (BLUD), the Regional Revenue and Expenditure Budget (APBD), the Regional Budget from the Special Allocation Fund or the Special Allocation Fund (DAK), and the Tobacco Excise Revenue Sharing Fund (DBHCHT). The realization of the budget that has been approved by management, but not all of the proposed budget is realized, this is due to budget constraints so that its fulfillment uses a priority scale and will be included in the Follow-Up Plan (RTL) process to be re-proposed in the following year.

# d. The Process of Implementing Medical Equipment Procurement Work, Adjusting the Layout of the Dental Clinic and Obstacles

The process of carrying out the work of procuring medical devices and adjusting the layout of the dental polyclinic at Batang Hospital is carried out with the latest Presidential Regulation Guidelines Number 12 of 2021 concerning Government Procurement of Goods/Services and also the latest regulations of the Government Goods/Services Procurement Policy Institute (LKPP). The implementation of the procurement of medical equipment is carried out with a Budget Determination Document (DPA) in accordance with the needs. Law of the Republic of Indonesia Number 44 of 2009 explains that hospitals can guarantee the availability of medical devices, so the availability of equipment by the hospital greatly affects the quality of health services provided (1), including patient satisfaction.

Obstacles in the implementation of goods procurement work and spatial adjustment of the Dental Poly Unit are constrained by budget constraints so that not all proposed needs are met, but can be re-submitted in the following year. In line with the research by Kenedi et al. (2017) regarding the purchase of medical devices at the Padang Pariaman Hospital, the results show that the implementation of the procurement of medical devices at the Padang Pariaman Hospital is not fully in accordance with the needs of the hospital (8).

The risk of procuring goods and adjusting the layout of the dental polyclinic unit that has not been fulfilled is the obligation and responsibility of the Batang Hospital management. The form of protection is by providing level 3 PPE, vaccines and assistance from the Batang Hospital management. The results of the output are expected to provide maximum service to patients in hospitals. In line with Anwar (2011), said that occupational safety and health is a science to control hazards and risks to be able to minimize the occurrence of accidents and injuries, as well as prevention efforts against workers who experience health problems caused by working conditions or from the work environment of the workforce these (10).

The impact of the need for medical devices and the adjustment of the spatial layout of the dental poly unit that has not been met according to standards greatly affects the quality of services provided, for example, the waiting time for patients becomes quite long. Inadequate medical equipment and a spatial layout that does not meet the standards will be very risky for health workers, patients, dentists and dental nurses who are very at risk of contracting the Covid-19 virus which will also have a less than optimal impact on health services (11), (12). In addition, the risk of infection acquired in health care facilities can develop and cause new problems for patients and health workers so that it becomes a risk and threat to their survival (13), (14)

### e. Input Component

- a. Standard Operating Procedure (SOP) is a regulation or guideline that becomes a reference in the procurement of medical device goods and the layout of the dental clinic at Batang Hospital. The results of the policy research in the implementation of the procurement of medical equipment and the layout of the dental clinic at the Batang Hospital are guided by the Hospital Classification and Licensing and the Government Goods/Services Procurement system.
- b. The implementation of the procurement of medical equipment and the layout of the dental polyclinic of Batang RSUD was found to be fully supported by a sufficient number of human resources and had fulfilled the requirements, namely having a certificate of expertise in goods/services and qualified in quality with the presence of electromedical experts.

c. The procurement of medical equipment and the layout of the dental clinic at the Batang Hospital is fully supported by adequate facilities and infrastructure. Facilities and infrastructure are important resources in supporting the implementation of the duties of officers who work in a field of procurement of medical devices in hospitals.

# f. Process Components

1. Planning for Determining Needs and Prioritizing Needs to improve the quality of health services in Batang Hospital.

The results of the research on the planning process for determining needs starting from requests for needs from each installation or user are recapitulated and discussed with the leadership director, non-medical medical services, medical support and planning sectors to determine priority hospital needs for Special Allocation Fund (DAK) funds. a proposal/user request is submitted by the medical support sector to the planning sector for priority adjustment with the menu of medical devices available on the Special Allocation Fund (DAK) menu. If the priority needs are not available on the Special Allocation Fund (DAK) menu, they will be transferred to other needs in the Special Allocation Fund (DAK) menu. Planning of medical equipment in health care facilities requires the involvement of medical equipment technical personnel, medical personnel, nursing staff, infrastructure technical personnel and management. In order for the implementation of the procurement of medical devices at the Batang Hospital in the planning process of determining the needs and priorities of the Batang Hospital, forming a planning team, making a Standard Operating Procedure (SOP) for the implementation of the assessment of medical equipment needs, involving electrical engineering personnel, the field of hospital infrastructure

### 2. Budgeting / Funds

The results of the study indicate that for budgeting / funds in the implementation of the procurement of dental health equipment and spatial planning for dental polyclinics, they are sourced from the Regional Public Service Agency (BLUD), the Regional Revenue and Expenditure Budget (APBD) through the Ministry of Health in the form of a Special Allocation Fund (DAK). Procurement of medical equipment and the layout of the dental polyclinic of Batang Hospital is to improve the quality of dental and oral health services at the hospital which in turn supports the improvement of public health status. In meeting the needs of the hospital's own medical equipment, the amount of funds needed is not small. (9) The budget allocation to meet the needs of hospital medical equipment is 40-50% of the total hospital budget as a whole.

- 3. Procurement of Medical Devices and Spatial Planning for the Dental Poly Hospital of Batang is an activity to carry out the selection of procurement providers carried out by the procurement committee to meet the needs of users / dentists. The results of the research on the process of implementing the procurement of medical equipment and spatial planning of the dental clinic at Batang Hospital were carried out by Purchasing through the E-catalogue.
- 4. The implementation of the procurement of medical devices and the layout of the dental polyclinic is an examination carried out by the receiving/examiner committee in the procurement of medical devices at the Batang Hospital. The results of the study on the acceptance of the implementation of the procurement of medical devices at the Batang Hospital were that the acceptance was carried out by a team of recipients of one person

from an eletromedical worker. The process of receiving the procurement of medical devices goes through the stages of physical inspection of the equipment or administration, testing the function of the equipment and testing the equipment. To obtain medical devices that are in accordance with the needs of the hospital, the user and can be utilized directly in the health services of the receiving/examiner team of the medical device must ensure that the medical device has been installed by the provider, conduct administrative checks, examine the function of the equipment and test the equipment.

# g. Component Output

Part / element resulting from the ongoing process in the system. The expected output is the suitability of the provision of medical equipment procurement and the layout of the dental poly with the needs of the user / dentist that can be used directly in health services at Batang Hospital (15). The results of the research on the implementation of the provision of medical equipment and the layout of the dental polyclinic at Batang Hospital were not fully in accordance with the needs of hospitals and users/dentists. This is because there are still equipment procurements that have not been fulfilled, the spatial planning of the dental clinic mismatched teeth. Procurement that is not in accordance with the needs can lead to not optimal utilization by the user / dentist in dental and oral health services. Hospitals must always make improvements by evaluating the procurement process for medical devices by paying attention to each component that supports the procurement process starting from input in the form of standard operating procedures policies, human resources, facilities and infrastructure, as well as the planning, budgeting, procurement and implementation processes so that future implementation the procurement of medical equipment and the layout of the dental polyclinic of Batang Hospital becomes more effective and efficient.

### **IV.** Conclusion

- 1. The process of proposing medical devices and adjusting the layout of the dental clinic is carried out with Standard Operating Procedures (SOP), involving all units such as dentists, management, section for medical and non-medical support, Medical Electrical Engineering (AKTEM) experts.
- 2. The planning process for the procurement of medical devices and adjustments to the layout of the dental polyclinic is carried out by selecting a direct appointment provider through Epurchasing / Ecatalog and Health Technology Assessment.
- 3. The process of budgeting medical devices and adjusting the layout of the dental polyclinic, the source of funding comes from the Regional Public Service Agency (BLUD), the Regional Revenue and Expenditure Budget (APBD), the APBD from the Special Allocation Fund or the Special Allocation Fund (DAK), and DBHCHT (Tobacco Excise Revenue Sharing Fund).
- 4. The process of carrying out the work of procuring medical devices, adjusting the layout of the dental polyclinic is carried out with the latest Presidential Regulation Guidelines Number 12 of 2021 concerning Government Procurement of Goods/Services and also the latest LKPP regulations.
- 5. Obstacles in the implementation of goods procurement work and spatial adjustment of the Dental Poly Unit are constrained by budget constraints so that not all proposed needs are met, but can be re-submitted in the following year.

- 6. The risk of procuring goods and adjusting the layout of the dental polyclinic unit that has not been fulfilled is the obligation and responsibility of the management of Batang Hospital. The form of protection is by providing level 3 PPE, vaccines and assistance from the Batang Hospital management. The results of the output are expected to provide maximum service to patients in hospitals.
- 7. The process of procuring dental medical equipment in Batang Hospital is seen in the system approach of input component policies, standard operating procedures, human resources, budget / funds and infrastructure are not fully appropriate. The process component is in accordance with the latest Presidential Regulation Guidelines Number 12 of 2021 concerning Government Procurement of Goods/Services, while the output component of the procurement of goods and the layout of the dental clinic at Batang Hospital is not fully in accordance with the needs of users/dentists.

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