



## Analysis of the legal basis for evaluating the implementation of the infection control planning and prevention (ppi) program at the royal prima hospital in Medan in 2023

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### Abstract

The government regulates regulations regarding the technical requirements of hospital accreditation contained in Law No. 44 of 2009 article 40 which states "In an effort to improve hospital services, regular accreditation must be carried out at least every 3 (three) years. In 2012, hospital accreditation began to shift and oriented to a new paradigm where accreditation assessment is based on patient-focused services. The method used in this study is a qualitative analysis method. In particular, this study is a comparative descriptive study with a case study design. The location of study was conducted at RSU Royal Prima Medan. The time of this study is between February-March 2022. The subjects in this study were respondents who came from people who were considered competent in providing information related to PPI which included, the director of Royal Prima Medan Hospital, the PPI Committee consisting of the Chairman (IPCD / Infection Prevention and Control Doctor), the Secretary (IPCN / Infection Prevention and Control Nurse, IPCLN (Infection Prevention and Control Link Nurse), and PPI Committee Members. Another subject is the Head of the Inpatient Room of the Head of Section at RSU Royal Prima Medan related to supporting service facilities and facilities related to PPI. The results of the Search / Survey on the Implementation of the Infection Prevention and Control Program at Royal Prima Hospital Medan based on the National Accreditation Standard (SNARS) Edition I are described in table 4.1. Based on the search results, the score for PPI at RSU Royal Prima Medan is 74.6%. Based on the results of research, discussion, and literature search, from this research, it can be concluded that general hospitals Royal Prima Medan has implemented an Infection Prevention and Control System (PPI) in hospitals based on the Regulation of the Minister of Health of the Republic of Indonesia Number 27 of 2017. Implementation of the Infection Prevention and Control System (PPI) at Royal Prima hospital has been running well so far, as can be seen from the commitment of the leadership of the Royal Prima Hospital and PPI Organization to integrate to run PPI programs at Royal Prima Hospital Medan. Some of the obstacles faced in the implementation of PPI at Royal Prima Hospital, are funding problems that cannot be maximized it has an impact on the lack of training activities related to PPI to external hospitals.

**Keywords:** Legal foundation, planning, prevention, control, infection

### Introduction

The government regulates regulations regarding the technical requirements of hospital accreditation contained in Law No. 44 of 2009 article 40 which states "In an effort to improve hospital services, regular accreditation must be carried out at least every 3 (three) years. In 2012, hospital accreditation began to shift and oriented to a new paradigm where accreditation assessment is based on patient-focused services. Patient safety became the main standard indicator of the new accreditation assessment known as the 2012 version of Hospital Accreditation. This accreditation system refers to JCI (Joint Commission International), it includes patient-focused service standards, hospital management standards, hospital patient safety goals and MDGs program standards. The goal of JCI itself is to improve the quality of care and patient safety without increasing costs. Changes in applicable standards need to be followed by changes in mindset and culture in hospitals from provider-oriented to patient-oriented. The Hospital Accreditation assessment instrument uses the 2012 version of the Hospital Accreditation Commission (KARS), the content of which is the adoption of the JCI version of the Hospital Accreditation Instrument coupled with hospital services that must be carried out periodically at least every 3 (three) years (Wardani & Suyanto, 2022) <sup>[20]</sup>; (Noor, 2013) <sup>[14]</sup>.

As a continuation to measure the results of this work, it is necessary to have another measuring instrument, namely a

hospital service quality instrument that assesses and solves problems with the results (*output*) (Anfal, 2020) <sup>[2]</sup>. Patient safety is the main standard indicator of the new accreditation assessment known as the 2012 version of Hospital Accreditation (Neri *et al.*, 2018) <sup>[13]</sup>. HAIs (Healthcare-Associated Infection) are the most vulnerable issues that are not only a problem in hospitals (Ukuhor, 2021) <sup>[19]</sup>, but it is also a global problem (Rickman *et al.*, 2021) <sup>[16]</sup>; (Zhou *et al.*, 2020) <sup>[23]</sup>. The incidence of HAIs in the world varies between 4-10%, in the United States, the prevalence of HAIs in hospitalized patients is 5-10%, and contributes as many as 100,000 deaths per year. In the UK, it is estimated that 8-9% of patients infected with the infection can come from the health service. Meanwhile, in Indonesia, the incidence of HAIs obtained is only 0-1% through surveillance (Suherlin, 2020) <sup>[18]</sup>.

Implementing a culture of infection prevention can improve the quality of service both directly and indirectly to patients and patient's families so that they become agents of change (Fennelly, 2020) <sup>[5]</sup>; (Stull *et al.*, 2018) <sup>[17]</sup>. In the SNARS Edition I standard, there are standards for infection prevention and control (Putra *et al.*, 2022) <sup>[15]</sup>. The purpose of infection prevention and control programs in hospitals is to identify and reduce the risk of infection transmission or transmission among patients, staff, health professionals, contract workers, volunteers, students, and visitors. The most important factor in the success of the PPI program is

the commitment of the Hospital director to form a competent PPI Team and PPI Hospital Surveillance. Infection Prevention and Control (PPI) is included in the hospital management standards group so that a good PPI organizing system can improve the quality of hospital services (Putra *et al.*, 2022) <sup>[15]</sup>.

RSU Royal Prima Medan is one of the Type B hospitals in North Sumatra. The vision of Royal Prima Hospital is to provide quality health services, that are affordable to all levels of society and orient towards patient safety and customer satisfaction. Based on the background mentioned above, researchers are interested in researching how Infection Prevention and Control Management (PPI) at Royal Prima Hospital Medan is based on the Regulation of the Minister of Health of the Republic of Indonesia Number 27 of 2017 concerning Guidelines for Infection Prevention and Control in Health Service Facilities assessed with SNARS.

**Literature review**

The goal of organizing an IOP program is to identify and reduce the risk of infections acquired and transmitted among patients, staff, health professionals, contract personnel, volunteers, students and visitors. Infection risks and program activities may vary from hospital to hospital, depending on the hospital's clinical and service activities, patient population served, geographic location, number of patients and number of staff.

The program will be effective if it has a defined leader, good staff training, methods to identify and be proactive at infection risk sites, adequate policies and procedures, staff education and coordination throughout the hospital. The purpose of organizing the PPI (Infection Prevention and Control) program, is to identify and reduce the risk of acquired and transmitted infections among patients, staff, health professionals, contract workers, volunteers, students, and visitors (Astari *et al.*, 2022) <sup>[3]</sup>. Infection risk and program activities may vary from hospital to hospital, depending on clinical activities and hospital services, patient population served, geographic location, number of patients, and number of employees.

According to the Minister of Health of the Republic of Indonesia Number 27 of 2017, concerning Guidelines for Infection Prevention and Control in Health Service Facilities. Where in the regulation, it is stated that the PPI

program will be effective if it has a designated leader, good staff training, methods to identify and be proactive in places at risk of infection, adequate policies and procedures, staff education and coordination throughout the hospital (Indonesia, 2017) <sup>[8]</sup>.

**Research methods**

The method used in this study is a qualitative analysis method. In particular, this study is a comparative descriptive study with a case study design. The location of study was conducted at RSU Royal Prima Medan. The time of this study is between February – March 2022. The subjects in this study were respondents who came from people who were considered competent in providing information related to PPI which included, the director of Royal Prima Medan Hospital, the PPI Committee consisting of the Chairman (IPCD / Infection Prevention and Control Doctor), the Secretary (IPCN / Infection Prevention and Control Nurse, IPCLN (Infection Prevention and Control Link Nurse), and PPI Committee Members. Another subject is the Head of the Inpatient Room of the Head of Section at RSU Royal Prima Medan related to supporting service facilities and facilities related to PPI.

An operational definition, management is a process of stages of activity consisting of planning, organizing, implementing, and supervising by combining the use of science and art to achieve organizational goals. Data collection instruments and techniques are surveys, observations, document reviews, and interviews conducted by researchers. Observation of this study used an observation checklist and a search method adapted from the SNARS accreditation standard. Data analysis was carried out by Triangulation Test by finding facts during surveys and observations regarding the implementation of the PPI program at RSU Royal Prima Medan seen from the system with a management approach and by comparing the assessment elements in SNARS.

**Results of research and discussion**

The results of the Search / Survey on the Implementation of the Infection Prevention and Control Program at Royal Prima Hospital Medan based on the National Accreditation Standard (SNARS) Edition I are described in table 4.1. Based on the search results, the score for PPI at RSU Royal Prima Medan is 74.6%.

**Table 1:** Survey on the Implementation of Infection Prevention and Control Programs at Royal Prima Hospital Medan based on the National Accreditation Standard (SNARS) Edition I

No	Information	Score	Percentage (%)
A.	Leadership and Governance		
1.	Standard PPI 1	30	75
2.	Standard PPI 2	30	75
B.	Resources		
3.	Standard PPI 3	30	75
4.	Standard PPI 4	30	75
C.	PPI Program Objectives		
5.	Standard PPI 5	30	75
6.	Standard PPI 6	30	75
7.	Standard PPI 6.1	15	50
8.	Standard PPI 6.2		
D.	Medical Equipment and Medical Consumables		
9.	Standard PPI 7	30	75
10.	Standard PPI 7.1	30	75
11.	Standard PPI 7.2	30	75
12.	Standard PPI 7.2.1	15	75

13	Standard PPI 7.3	15	75
14	Standard PPI 7.3.1	30	75
E.	Infectious Waste		
15	Standard PPI 7.4	30	62,5
16	Standard PPI 7.4.1		
17	Standard PPI 7.5	50	83,33
F.	Food Service		
18	Standard PPI 7.6	30	75
G.	Construction Risks		
19	Standard PPI 7.7	0	0
20	Standard PPI 7.7.1	30	80
H.	Transmission of Infection		
21	Standard PPI 8	15	65
22	Standard PPI 8.1	30	75
23	Standard PPI 8.2	40	75
24	Standard PPI 8.3	0	0
25	Standard PPI 9	35	87,5
26	Standard PPI 9.1	30	75
I.	Quality Improvement and Education Programs		
27	Standard PPI 10	31	78
28	Standard PPI 11	31	78
	Accumulative Score		74,6

From the overall standards, it is still found that some standards have a score of "0". Interview Results regarding the Implementation of the Infection Prevention and Control Program at Royal Prima Hospital Medan. The thing that wants to be known in the interview is how to implement infection prevention and control at Royal Prima Hospital Medan by considering aspects of problems or conflicts from a managerial point of view and the commitment of members. The leadership's commitment to implementing infection prevention and control programs has existed at Royal Prima Hospital Medan since 2015 when the PPI Team began to be formed. The next form of support to find out the description of the leadership's commitment, the researcher asked respondents for some information about facilities and infrastructure, human resources, and budgets in the PPI Team related to the fulfillment of facilities. From in-depth interviews, it was found that in terms of fulfilling facilities and budgeting PPI, the hospital leadership strongly supports the program.

Integrated management support is budget and human resources in the form of providing budgets or funds for education and training activities outside the hospital to form a PPI Team. Meanwhile, education and training conducted in the hospital (in-house training) for all employees related to basic PPI was last carried out in 2015. Until now, it has not been found in the PPI program documents related to basic PPI in-house training planning. Communication and Cooperation in the Implementation of PPI, meetings between leaders and subordinates and reports containing activities of the Infection Prevention and Control program are communication activities that can be carried out to support the success of PPI in hospitals (Kunang & Puspariny, 2021); (WHO, 2018) <sup>[10]</sup>. Based on data obtained from IPCN, regular socialization is carried out at the time of regular employee meetings at the end of each month and at the time of orientation of new employees.

In this study to find out an overview of member commitment, the researcher asked respondents for some information related to the PPI work program and the duties and functions of staff in the PPI Team at RSU Royal Prima Medan. Based on the results of interviews with respondents who are members of the PPI Team, not all members know

who sits in the PPI organizational structure and their duties and responsibilities in the PPI Team. The work program that has been created by PPI is not entirely known and understood by its members. Through the results of in-depth interviews, it can be seen that the respondents of the PPI Team members know their respective duties and responsibilities.

Infection prevention and control in hospitals and other health care facilities are also part of the implementation of hospital and other health care facility standards so that their success can be displayed for the completeness of accreditation of hospitals and other health care facilities (Herman & Handayani, 2017) <sup>[7]</sup>. Law (UU) Number 44 of 2009 concerning Hospitals, the third part of article 40 states that to improve the quality of hospital services, accreditation must be carried out periodically for at least 3 (three) years, carried out by an independent institution both nationally and internationally based on applicable accreditation standards. PPI is set out in Chapter II of Hospital Management Standards in SNARS Edition I with 9 sub-chapters and 28 Standards (Ministry of Health Republic of Indonesia, 2018) <sup>[11]</sup>.

The results of the search conducted by the researchers obtained the achievement of the PPI score at Royal Prima Hospital Medan of 60.2%. This figure is still below 80% so it can be said that it did not pass according to the accreditation standards of SNARS Edition I. Based on this, it can be said that the shortcomings in the standards are related to infection risk management. Infection prevention and control in hospitals is a program that needs to be supported by hospitals. In identifying infection problems, it is necessary to analyze the risk management related to infection in the hospital first.

Further implementation evaluations are grouped by sub-chapters in the PPI as follows:

1. Functionally, the Infection Prevention and Control Team of Royal Prima Hospital Medan is under the Director of the Hospital. This shows the commitment of the Director to PPI so that a PPI Team was formed at RSU Royal Prima Medan. The current PPI Team Leader is a contract doctor who is appointed and has

received education and training on PPI, all specialist doctors are consuls for the smooth implementation of duties. This team has one IPCN (Infection Prevention and Control Nurse) person who is still not fully retired because he concurrently serves as Head of Nursing and Head of the Nursing Team. The IPCN has received education and training on Advanced PPI.

2. Other memberships in the current organizational structure functionally involve only nurses, midwives, and nutritionists and thus involve fewer other units in the field are involved in the eleven main components that must be implemented and adhered to in standard vigilance such as linen, CSSD, and pharmacy sections. Based on the search, in the PPI Team Decree, the PPI Team Organizational Structure has members who come from other parts besides nurses, midwives, and nutrition. Please be aware that the success of the PPI program in hospitals requires cross-professional involvement (Ministry of Health Republic of Indonesia, 2018) <sup>[11]</sup>, Clinical, Nurse, Laboratory, K3L, Pharmacy, Nutrition, IPSRS, Sanitation, and House Keeping so it needs a container in the form of a PPI Committee. If this PPI Program is carried out properly, the quality of hospital services will be guaranteed to be good (Elianah, 2020) <sup>[4]</sup>; (WHO, 2019) <sup>[22]</sup>.
3. Another shortcoming related to leadership and governance is regarding the organizational regulation of the PPI Team which is not equipped with its job description and the appointment of its members who have not been socialized as previously described. Respondents who knew the organizational structure of the PPI Team in the hospital well stated that the structure already existed but did not see a coordination relationship or functional relationship with their superiors so the cooperation that was established was not optimal. According to WHO (2015), the success factors of infection prevention and control programs in hospitals include the existence of management support, organizational structure, the role and function of IPCN (Infection Prevention and Control Nurse), the authority of the PPI (Infection Prevention and Control) team, available facilities, the commitment of individuals to be aware, caring and responsible for preventing infection. (WHO, 2018); (Mustariningrum & Koeswo, 2015) <sup>[12]</sup>.

Running a nosocomial infection prevention and control organization requires interaction, coordination, awareness, and interest between disciplines and is supported by reliable management. According to Amaliah (2017), commitment can be increased by developing a performance improvement monitoring system (Amaliah *et al.*, 2017) <sup>[1]</sup>, and an understanding of the values and objectives of the hospital to maintain conformity between the vision and mission to the implementation of infection prevention and control efforts, conduct an evaluation of nosocomial infection prevention and control policies based on the advice of the PPI team (Indonesia, 2017) <sup>[8]</sup>.

In the Guidelines for Infection Prevention and Control in Hospitals and Health Service Facilities, support for the successful implementation of infection prevention and control is the provision of budgets or funds for education and training activities (Indonesia, 2017) <sup>[8]</sup>. The infection prevention and control team is required to attend basic and advanced PPI education and training and obtain a PPI certificate and develop themselves by attending seminars, workshops and receiving continuous technical guidance. So

that the criteria as chairman, secretary, and member can be met as a capable resource (Kartika *et al.*, 2015) <sup>[9]</sup>, providing staff education and training on infection control programs such as sterilization techniques, requiring staff (nurses, laboratories, cleaners) to maintain hospital cleanliness, conduct periodic evaluations of the effectiveness and control measures of infection, facilitate and support infection control measures, and participate in tracing the occurrence of infections (WHO, 2019) <sup>[22]</sup>. In terms of budget costs, it can be seen that the management is committed to running the PPI program at the Sick Hospital, as can be seen from the complete prevention facilities such as hand rubs, hand sanitizers in every corner of the hospital room, as well as tissues, masks, gloves, and other personal protective equipment for medical personnel. According to Annur (2011), The process of preparing the Work Plan and Budget is the first step of the implementation of the work program that has been prepared, the current calculation can be used as a benchmark for whether the coming year the implementation of the work program can be carried out properly (Firana & Abbas, 2020) <sup>[6]</sup>.

At the beginning of the formation of the PPI team at RSU Royal Prima Medan, it has undergone two restructurings. In early 2022, there was a shift in IPCDs from doctors who had previously terminated contracts, so hospitals had to appoint new IPCDs and dispatch PPI training. It can be said that there is support from the leader and management so that PPI activities in hospitals can continue to run. The results of observations and interviews of researchers with respondents found that the implementation of PPI at Royal Prima Hospital Medan has been running for two years and is based on the Regulation of the Minister of Health of the Republic of Indonesia Number 27 of 2017 concerning Guidelines for Infection Prevention and Control in Health Service Facilities. However, some PPI programs do not cover all aspects of hospitals because no budget fully supports the PPI program, and monitoring has not been carried out optimally by the leadership. During the search, it was found that there was an Infection Surveillance Guide at Royal Prima Hospital Medan. Infection surveillance data of Royal Prima Medan Hospital is collected and made only by IPCN in the form of quarterly reports. Hospitals can use indicator data and information and compare them with levels and trends in other hospitals (Ministry of Health Republic of Indonesia, 2018) <sup>[11]</sup>.

## Conclusion

Based on the results of research, discussion, and literature search, from this research, it can be concluded that:

- a. General hospitals Royal Prima Medan has implemented an Infection Prevention and Control System (PPI) in hospitals based on the Regulation of the Minister of Health of the Republic of Indonesia Number 27 of 2017.
- b. Implementation of the Infection Prevention and Control System (PPI) at Royal Prima hospital has been running well so far, as can be seen from the commitment of the leadership of the Royal Prima Hospital and PPI Organization to integrate to run PPI programs at Royal Prima Hospital Medan.
- c. Some of the obstacles faced in the implementation of PPI at Royal Prima Hospital, are funding problems that cannot be maximized it has an impact on the lack of training activities related to PPI to external hospitals.



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