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PROGRAM IMPLEMENTATION OF NEONATAL MATERNAL REFERRAL INFORMATION SYSTEM FOR IMPROVING THE QUALITY OF HEALTH SERVICES IN HOSPITAL

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ABSTRACT:
The Indramayu government effort to reduce the Maternal Mortality Rate (MMR) and the Infant Mortality Rate (IMR) is to improve the quality of health services, where nationally Indonesia seeks to achieve the commitment of the 2015 Global Millenium Development Goals (MDGs) based on the 2012 IDHS (Indonesian Population Demographic Survey) data—reported that MMR and IMR were 359 / 100,000 live births and 19/1000 live births. This research is a case study of a government program implemented in Indramayu as an acceleration of activities so that MMR and IMR tend to be stagnant. Most of the maternal and infant deaths occurred in the hospital due to delays in referral, late arrival at the Hospital, and treatment at the Hospital. Midwives who refer pregnant women, mothers giving birth, newborns to the Hospital have no communication with the Hospital, so it often happens that when patients arrive at the Hospital, there are no doctors who are ready to serve. The treatment room is full. On the other hand, doctors and midwives in Runah Hospital do not know the patient's condition to be treated at the hospital, so that the anticipation of patient handling cannot be done. Maternal and Neonatal Referral Systems utilize information technology applications to solve the above problems so that midwives know the readiness of the Hospital and the Hospital Pain is ready to accept patients with previously known conditions. With regard to the West Java Governor Regulation Number 64 of 2013 concerning the Health Service Referral System, the Indramayu Regency Government has innovated to launch an Indramayu Version Maternal Neonatal Referral Information System Program. The Indramayu Version Maternal Neonatal Referral Information System Program aims to provide services to pregnant women so that they can easily get help when before delivery so as to reduce the risk of maternal and infant mortality. This program is an

information technology-based communication and information system for pregnant women, health workers, and health facilities in the process of pregnancy, delivery planning, prevention of complications, and emergency neonatal referrals aimed at saving mothers and babies, implemented by the Indramayu government for beneficiaries for free. Since early November 2014, it has been implemented by Midwives, Community Health Centers, and Regional General Hospitals (RSUD) in Indramayu. The Indramayu Version Maternal Neonatal Referral Information System Program is for referrals and 2-way consultations between the Hospital and Midwives, monitoring Referring Midwives and the Status of Referred Patients, managing questions, suggestions, aspirations/complaints, providing information about pregnancy. Based on the formulation of the problem, first, the midwife who will refer pregnant women/mothers to give birth/newborns to the hospital has no communication with the hospital, Second there is still low socialization of the Indramayu Version of the Maternal Neonatal Referral Information System Program to the hospital. The community is the target group, so there are still many people who do not know the Indramayu Version of the Maternal Neonatal Referral Information System Program, causing many pregnant and childbirth mothers to be less consulted about maternal and child problems at risk; The three limited infrastructure targets in the implementation of the Indramayu Version Maternal Neonatal Referral Information System Program services at the Regional General Hospital (RSUD) Indramayu Regency. The final results show that the performance of this program has a significant impact on improving health services in hospitals so that the mortality rate for pregnant women and women giving birth in terms of the number of cases of death can be suppressed so that this policy needs to be implemented continuously.

INTRODUCTION:

The reduction in Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) is increasingly being carried out to improve the quality of health services in Indonesia and efforts to achieve the commitment of the 2015 Global Millenium Development Goals (MDGs). However, until now (MMR) and (IMR) in Indonesia are still very high. This can be seen in data from the 2012 IDHS (Demographics Population Survey of Indonesia), which reported that MMR and IMR were 359 / 100,000 live births and 19/1000 live births. Therefore, efforts to accelerate activities are needed so that MMR and IMR, which tend to be stagnant (not falling), can immediately reach a significant decline.The Indonesian Ministry of Health, through the Director of Maternal Health, established the National Action Plan for the Acceleration of Reduction in Maternal Mortality Rate (RAN PPAKI) for 2013-2015. This is because one of the main obstacles to the slow decline in MMR in Indonesia is the obstacle to the provision and access of emergency observational services (Velandia-González et al., 2021). The handling of emergency cases still relies on advanced health care facilities at the hospital, while the handling of complications cases has not been going well. Therefore, it is necessary to have a division of duties among various health service units through a referral system structure (Ministry of Health 2007, in Health System Research Bulletin Vol. 8 No.4 October 2015: 365-375).

With the support of USAID (United States Agency for International Development) from the United States, the Ministry of Health of the Republic of Indonesia launched a Maternal Neonatal Referral Network Information

System Program, which is a system developed by the EMAS (Expanding Maternal and Neonatal Survival) Program in 2012. Program objectives This is to assist the Provincial Government and District / City Government to reduce the MMR and IMR by 25%. According to USAID, nearly 70% of maternal deaths and 75% of newborn deaths occurred in Java and Sumatra. There are about 30 districts selected in Java and Sumatra, one of which is in West Java Province, namely the districts around the intervention area of Cirebon City, namely Indramayu Regency, Majalengka Regency, and Kuningan Regency.Indramayu is one of the districts in West Java Province out of 30 districts in areas with the highest (MMR) and (IMR) in Indonesia. Most maternal and infant deaths occur in hospitals due to delays in deciding to refer, late arrival at the hospital, and late treatment at the hospital. Midwives who refer pregnant women/mothers to give birth/newborns to the hospital do not communicate with the hospital.Maternal and Neonatal Referral Systems, by utilizing information technology applications, can overcome these problems so that midwives know the Hospital's readiness and the Hospital is ready to accept patients with previously known conditions. Concerning West Java Governor Regulation Number 64 of 2013 concerning the Health Service Referral System, the Indramayu Regency Government has innovated to launch an Indramayu Version Maternal Neonatal Referral Information System Program (Achadi et al., 1995). The implementation of this program encourages the government to provide free services to pregnant women so that they can quickly get help during childbirth so that which has an impact on reducing the risk of maternal and infant mortality.The Indramayu version of the Maternal Neonatal Referral Information System Program is an information technology-based communication and information system for pregnant women, health workers, and health facilities in the process of pregnancy, delivery planning, prevention of complications, and referral for maternal, neonatal emergencies that aim to save mothers and babies (Honda et al., 2019). This program is a product of Leadership Education and Training III (Diklatpim III), held from 2 June 2014 to 21 October 2014. The Regent of Indramayu, Hj, then inaugurated it. Anna Sophanah (represented by expert staff) on September 16 2014. Since early November 2014, it has been implemented by midwives, Puskesmas, and RSUD in Indramayu. The Indramayu Version Maternal Neonatal Referral Information System Program is not only for referrals, but also for 2-way consultations between the Hospital and Midwives, monitoring Referring Midwives and the Status of Referred Patients, managing questions, suggestions, aspirations/complaints, providing information about pregnancy, and delivery to pregnant women who are at risk

Some of these problems are described as follows: First, the midwife who will refer pregnant women/mothers to give birth/newborns to the hospital has no communication with the hospital, so what often happens is when the patient arrives at the hospital, there are no doctors who are ready to serve, or the treatment room is packed; Second. There is still low socialization of the Indramayu Version of the Maternal Neonatal Referral Information System Program to the community as the target group, especially those who are far from urban areas, so that there are still many people who do not know the Indramayu Version of the Maternal Neonatal Referral Information System

Program, especially pregnant women and mothers giving birth (Dossa et al., 2016). This causes many pregnant women and mothers to give birth less consultation about the problems of mothers and children at risk; The three facilities and infrastructure are limited in the implementation of the Indramayu Version Maternal Neonatal Referral Information System Program service at the Indramayu District Hospital (Achadi et al., 1995). Based on the background of the research problem that has been described, the authors propose the following problem formulations, How is the Implementation of the Indramayu Version of Maternal Neonatal Referral Information System Program Policy to improve the quality of health services at the Indramayu District Hospital (Sutrisna et al., 1993).

Literature Review

Policy Implementation

Public Policy Implementation Model George C. Edward III, The third policy implementation model with a top down perspective was developed by George C. Edward III in Leo, August (2014) who instilled his public policy implementation model with Direct and Indirect Impact on Implementation. In the approach in the theory there are four variables that determine the success of policy implementation, including: (1) Communication, (ii) Resources, (iii) Disposition or attitude of implementers, (iv) Bureaucratic Structure.

Indramayu Version of the Maternal Neonatal Referral Information System Program

The referral system definition in Law No. 44 of 2009 concerning Hospitals cited (Maryunani, 2015) in his book "Integrated Maternal and Neonatal Emergency" that: "The referral system is the administration of health that regulates the mutual assignment of duties and responsibilities, both vertical and horizontal, structural and functional for an illness, health problem or health problem." So, handling maternal and neonatal emergencies is a treatment that includes specific interventions to handle cases of emergencies or complications during pregnancy, childbirth and childbirth, as well as emergencies in newborns under the age of 30 days (Mortensen et al., 2019).

One of the programs carried out to reduce the MMR and IMR is the introduction of the EMAS (Expanding Maternal and Neonatal Survival) Program. EMAS is a joint program of the Ministry of Health of the Republic of Indonesia and USAID for five years (2012-2016) in order to reduce MMR and newborn IMR. One of the outputs of the EMAS program is the functioning of an effective and efficient and fair Mother and Newborn Emergency Referral System NB in all facilitated districts, as many as 10-30 districts for 5 years so that maternal and newborn mortality can be prevented as much as -many. Around 30 of the selected districts are in areas with MMR and IMR which are among the highest in Indonesia.According to USAID data, almost 70% of maternal deaths and 75% of newborn deaths occur in Java and Sumatra alone. For this reason, the companion program will begin in several

regions in Java and Sumatra. It is hoped that the areas that are accompanied can pass on their knowledge and experience in efforts to reduce MMR and IMR. The EMAS program supports national, provincial and district governments in networking with civil society organizations, public and private health facilities, hospital associations, professional organizations and the private sector, etc. The program contributes to the acceleration of the reduction in maternal and newborn deaths. by 25% in Indonesia. The aim is to assist the Provincial and Regency/City Governments to reduce 25% MMR and IMR which includes improving the quality of handling obstetric and neonatal emergency cases at the primary and secondary service levels, and increasing effectiveness and efficiency of the referral system starting at the community level, primary services up to secondary or hospital service levels.

Study on Health Service Quality Theory

Every public service delivery must have service standards and be published as a guarantee of certainty for service recipients. Service standard is a standardized standard in the administration of public services that must be obeyed by the service provider and/or recipient, according to (sugiyono, 2014) reveals that the dimensions of service quality consist of:

- Reasonability, namely responsibility that includes speed and accuracy in providing services as well as accuracy in providing information.
- Responsiveness, namely sensitivity to the needs of patients accompanied by appropriate actions in accordance with needs
- Assurance is a form of direct service in helping patients who are supported by knowledge and skills.
- Empathy is the ability to understand and pay attention to the psychological condition of the patient, in this case providing comfort to the patient.

Implementation of Indramayu Version of the Maternal Neonatal Policy Information System Program (MNPISP) in Improving the Quality of Health Services

As an increase in public services by service units managed by the Regional Government is a mandate mandated by various laws such as Law No. 25 of 2009 concerning Public Services and the Decree of the State Minister for Administrative Reform Number 63/KEP/M.PAN/7/2003 concerning General Guidelines for the Implementation of Public Services, Indramayu, which is one of the Regencies in the Province of West Java, namely, the District Around the Intervention Area gave birth to an innovation effort in the maternal and neonatal referral program, the Indramayu Version of the Maternal Neonatal Referral Information System Program.Quoted in Bandung Ekspres in 2015, Head of the Indramayu Regency Health Office, dr. Dedi Rohendi, MARS. accompanied by the Head of the Health Services Division, Yadi Hidayat explained that the Indramayu Regency Health Office was working on implementing the Indramayu Version of the Maternal Neonatal Reference Information System Program in an effort to suppress the MMR and IMR. The Indramayu Version of the Neonatal Maternal Referral Information System is

an information technology-based communication information system for pregnant women, health workers and health facilities in the process of pregnancy, delivery planning, prevention of complications and neonatal maternal emergency referral aimed at saving mothers and babies (Wang et al., 2020). The person in charge of the Referral System as referred to in Article 34 of the Governor Regulation of West Java No. 64 of 2003 concerning the Health Service Referral System are:

- The Regional Government and Regency/City Government are responsible for the availability of facilities that support the implementation of the referral system in accordance with applicable standards;
- The Head of the Service and the Head of the Regency/City Health Service are the ones responsible for organizing the health service referral system according to the authority based on the provisions of the legislation.

Indramayu District Health Office as a policy maker program organizes Indramayu Version of the Maternal Neonatal Reference System Information System program with the coordination of various parties, such as referring midwives and referred hospitals. Currently, the program is implemented in 8 puskesmas in Indramayu Regency, namely Kandanghaur, Filled, Sliyeg, Sukagumiwang, Gabuswetan, Sukra, Karangampel and Widasari. In addition to the Puskesmas, there are 4 Hospitals, namely Patrol Sentot Hospital, Sindang PMC Hospital, Indramayu District Hospital, and Zam-Zam Jatibarang Hospital.

The existence of the Call Center Midwife as a Call Center officer whose presence in the Indramayu Regency Health Office is ready to standby for 24 hours by consultation Via SMS to 082111502000 or Via Telephone (0234) 275732/ 08112412344/08194000015. The Role of the IVMNPIS Call Center is as an Information Operator for 24 hours 7 days a week, monitor the contents of incoming referrals, manage IVMNPIS administration, facilitate 2-way communication between Hospitals and Midwives, monitor Referral Midwives and referral patient status, manage questions, suggestions, aspirations and complaints, monitoring the IVMNPIS SMS application, documenting any references that enter the daily report book, managing death reports, and MONEV to Hospitals and Puskesmas Referral Networks. The policy of this program is the coordination of the referring fields that will take their patients to the hospital to confirm the patient's status and condition in advance to the Call Center with a referral response time, which is <10 minutes - 10 minutes. Implementation of Referral Information System Program Policies as regulated in West Java Governor Regulation No. 64 of 2003 concerning the Health Service Referral System, the scope of the organization of health service referral system includes medical referral or individual health service referral and public health service referral. The implementation of the health service referral system includes the medical referral level, the area of referral coverage, referral flow, referral requirements, Obligations for health service facilities, in charge of the referral system, information and communication, health workers, and guidance and supervision.In addition to the Program Policies, Minimum Service Standards are an important matter for public

service. Minimum Service Standards are stipulations about the types and quality of basic services which are obligatory functions of the region that are entitled to every citizen in a minimum. The provisions on Minimum Service Standards (MSS) are regulated in Circular of the Minister of Home Affairs Number 100/757 / OTDA 2002, then regulated further in Government Regulation Number 65 of 2005. The SPM provisions must be met by the Regency and City Governments in the provision of public services is a new thing in the history of the implementation of regional autonomy in Indonesia. An adequate understanding of SPM for the community is a significant thing because it is related with the constitutional rights of individuals and community groups that they must obtain and must be met by the government in the form of the availability of public services (basic services) that must be carried out by the government to the community. In carrying out its implementation, public service is also given to the public. Public service basically has the goal of satisfying the community, and to achieve satisfaction is manifested in the principles of service quality.

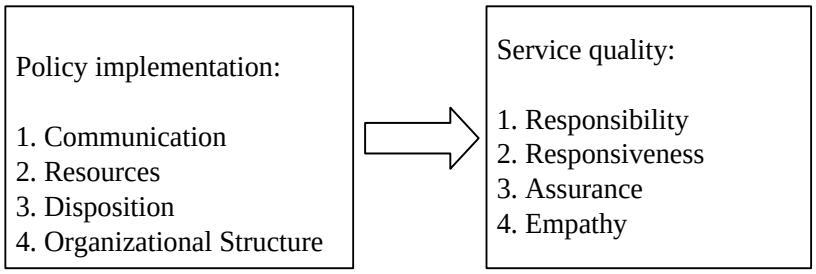

Figure 1, Thinking Paradigm

RESEARCH METHODS

In this research the method used is Descriptive Analysis Method with a quantitative approach. With primary and secondary data sources as well as quantitative and qualitative data types, namely the number of Call Center Midwives, Number of Midwives, the number of maternal and neonatal referral patients, the number of maternal and neonatal emergency staff, the number of nurses, and the number of paramedics using observation data collection techniques, interviews, and questionnaire.

Population

The population in this study was 4,280 people consisting of 8 neonatal maternity emergency officers, 8 midwife call centers, 13 midwives, 12 paramedics, 33 maternal and neonatal nurses, 33,206 maternal and neonatal referral patients.

Sample

In this study, samples that represented the entire population were the number of Call Center Midwives, the Number of 2016 Maternal and Neonatal Referral Patients, the Number of Neonatal Maternal Emergency Officers, Number of

Midwives, and Number of Nurses. Then to determine the number of samples, researchers used the Slovin formula generated 100 figures as respondents.

Variable Operations

Figure 2, Relationship Between Variables X and Y Variables

Note: X: Policy Implementation, Y: Quality of Health Services
For the sake of measuring research variables, the two variables need to be operationalized in a number of indicators as follows:
Table 1, Free Variable Operations (X) and Bound Variables (Y)

VARIABLES	DIMENSION	INDICATOR
Policy Implementation (Variable X) According to George C. Edward III	1. Communication	1. Program Socialization 2. Clarity of Implementation Guidelines 3. Consistency of communication
	2. Resources	1. Competence of Implementing Staff 2. Program Implementing Authority 3. Implementation Support Facilities 4. Conduct periodic training
	3. Disposition	1. Dedication of the Implementers 2. Responsibilities of Implementers 3. Providing incentives
	4. Bureaucratic Structure	1. Cooperation of Implementers 2. Coordination of Implementers 3. Implementation of the stipulated SOP
Service Quality (Variable Y) Sugiarto (2002: 33)	1. Responsibility	1. Speed of service handling 2. The accuracy of decision making 3. Accuracy of service information
	2. Responsiveness	1. Determination of service aspirations 2. Service infrastructure procurement 3. Simplicity of service procedures
	3. Assurance	1. Availability of service information 2. Easy access to service information 3. Professionalism of service officers
	4. Empathy	1. Absence of service differences 2. Service security guarantee 3. Optimized service quality 4. Consideration of honesty aspects

Scale of Measurement

For the purpose of analyzing variable data Policy Implementation and Service Quality can be seen from the tendency of respondents' answers by using the Likert scale. The measuring tool used in this study is the Likert scale. According to(sugiyono, 2014), "Likert Scale is a scale that can be used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena." five) alternative levels of answers arranged in stages by giving the weighting of scores (scores) as follows:

Table 2. Weight of Answer Scores

No.	Alternative Answers	Skor
1.	Very Agree / Very Good	5
2.	Agree / Good	4
3.	Not Agree / Good Enough	3
4.	Disagree / Not Good	2
5.	Very Disagree / Very Bad	1

Table 3. Classification of Percentage Assessment Criteria

No.	Percentage Interval	Criteria
5.	84 – 100	Very good
4.	68 – 83,9	Good
3.	52 – 67,9	Pretty good
2.	36 – 51,9	Not good
1	20 – 35,9	Very bad

DISCUSSION OF THE RESULTS

From the answers of respondents based on the results of the questionnaire regarding the Policy Implementation Variables are as follows:

Table 4. Tabulation of Respondents' Score Scores for Policy Implementation Variables (n = 100)

No. Statement	Answer Score					amount
	5	**4**	**3**	**2**	**1**	
. Communication						
1. Program socialization	40	76	162	30	4	312
Clarity of program implementation instructions	20	312	48	4	0	384
Consistency of referral orders	30	356	12	0	0	398

B. Resource						
Implementing staff competencies	60	280	12	20	4	376
program implementing authority	100	208	48	14	5	375
Program implementing support facilities	20	64	204	18	3	309
Regular training	60	252	51	6	5	374
C. Disposition						
Dedication of the executors	80	288	30	4	0	402
The responsibilities of the implementers	100	296	12	4	0	412
Incentives Giving	15	52	195	34	2	298
D. Bureaucratic Structure						
Bureaucratic cooperation	75	300	30	0	0	405
coordination of implementers	45	300	30	12	0	387
implementation of SOPs specified	25	312	36	10	0	373
Total	670	3096	870	146	23	4805

Based on the table above, the score obtained in Variable (X) of Policy Implementation then, it can be seen that the amount obtained from all respondents' score on the Policy Implementation Variable is 73.9% and can be categorized Good because it is in the range of 68% and 84%. This illustrates that the Implementation of Indramayu Version of the Maternal Neonatal Referral Information System Program Policy. In Indramayu Regency based on the dimensions of Communication, Resources, Disposition, and Bureaucratic Structure is Good. However, to maximize a policy implementation, it still needs improvement from all dimensions and indicators on the communication dimension, namely the implementation of the program socialization has not been maximally implemented, there are still many people who are not familiar with the Indramayu Version of the Maternal Neonatal Referral Information System Policy Program, even though the community, especially the mothers during pregnancy, childbirth, and post-partum is the target group that must be considered. Communication as according to George C. Edward (in Leo Agustino, 2014: 150) largely determines the success of achieving the objectives of Public Policy Implementation, besides that the policy being communicated must also be precise, accurate, and consistent.

Quality of Health Services

From the answers of respondents based on a questionnaire regarding the Health Service Quality Variables are as follows:

Table 5. Tabulation of Respondents' Score Scores for Health Service Quality Variables (n = 100)

No. Statement	Answer Score					amount
	5	**4**	**3**	**2**	**1**	
A. Responsibility						
. The speed of handling the patient	75	236	51	18	0	380
. Accuracy of patient handling	65	268	48	8	0	389
.Accuracy of service information	45	272	69	0	0	386
B. Responsiveness						
1. Response to service aspirations	40	288	54	0	4	384
.Provision of service infrastructure	65	152	84	24	5	334
3.simplicity of procedure	60	72	153	22	3	315
C. Assurance						
1. Availability of service information	35	244	48	20	5	353
2. Easy access to service information	60	160	96	20	0	342
3.Professionalism of service officers	25	244	66	36	0	374
D. Empathy						
1. Absence of service differences	75	116	81	38	2	320
2. Service security guarantee	30	296	39	14	0	379
3. Optimal service quality	80	176	66	24	0	352
4.Honesty	80	152	66	32	0	338
	735	2676	921	256	58	4646

Based on the table above, the score obtained in Variable (Y) Quality of Health Services is based on the Tabulation of Respondents 'Answer Scores, Based on the calculation results, it can be seen that the sum obtained from all respondents' responses to the Health Service Quality Variable is 77.4% and can be categorized as Good because it is in the range of 68% and 84%. This illustrates that the quality of health services at the Regional General Hospital (RGH) of Indramayu Regency based on the dimensions of Responsibility,

Responsiveness, Assurance, and Empathy is still in good condition. However, to maximize the quality of health services, it still needs improvement from all dimensions and indicators as discussed previously, such as the Responsiveness dimension, which is the availability of Infrastructure Services is not maximally available, such as postpartum space that is still limited, even though patients, especially the condition of mothers in the postpartum period still need to be considered. Responsiveness as according to (sugiyono, 2014) is a sensitivity to the needs of patients accompanied by appropriate action in accordance with these needs, by providing adequate infrastructure will create comfort for patients. So the percentage criteria classification is as follows:

Table 6. Classification of Percentage Assessment Criteria

No.	Percentage Interval	Criteria
1.	20 – 35,9	Very good
2.	36 – 51,9	Good
3.	52 – 67,9	Pretty good
4.	68 – 83,9	Not good
5.	84 – 100	Very bad

From the calculation above, both for policy implementation variables and service quality in Indramayu Regency have been implemented well but are still not optimal. Efforts to improve the implementation of policies and service quality are: 1. conveying ongoing socialization about the Si-Irma-Ayu program especially in suppressing MMR and IMR both by government officials and in collaboration with the Indramayu Midwives Association (IMA), and also through mass media, banners and radio. 2. The local government gives awards to officers who are dedicated and have high loyalty. 3. Access to information on services in reference to geographical location by establishing cooperation with village midwives.

CONCLUSION

From the results of the discussion of policy implementation variables show that the amount obtained from all respondents' response scores in the Policy Implementation Variable is 73.9% and can be categorized as Good because it is in the range of 68% and 84%. This illustrates that the Implementation of Indramayu Version of the Maternal Neonatal Reference System Information System Program in Indramayu Regency based on the dimensions of Communication, Resources, Disposition, and Bureaucratic Structure is Good. As for the service quality variable, the calculation result shows that the amount obtained from all respondents' score on the Health Service Quality Variable is 77.4% and can be categorized as Good because it is in the range of 68% and 84%. This illustrates that the Quality of Health Services in Indramayu District Hospital based on the dimensions of Responsibility, Responsiveness, Assurance, and Empathy is Good. This means that the implementation of Indramayu's neonatal referral maternal referral information system policy program in Indramayu Regency has been implemented well

which has an impact on the quality of health services to the community as well.

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