International Journal on Advanced Science, Education, and Religion (IJoASER)
E-ISSN: 2614-8862 & P-ISSN: 2565-0836
Volume 9, Number 1, March 2026

Analysis of the Accuracy of Diagnostic Codes in BPJS Patient Referrals Based on LCD-10 at the Ngegong Community Health Center in Madiun City

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ARTICLE INFO
Article history:
Received
January 09, 2026
Revised
February 13, 2026
Accepted
March 30, 2026

ABSTRACT

The accuracy of diagnostic codes refers to the proper classification of diseases according to ICD-10; a code is considered accurate if it complies with the applicable classification rules. This study employed a qualitative research design, utilizing the following data collection methods: interviews—from which the researcher obtained information—direct field observations, a review of documentation, and the use of a checklist for patient referral documents. The results included 44 patient referral documents from 2022–2024; of these, 26 (59%) medical records were found to be accurate, while 18 (41%) were inaccurate. Upon reviewing the inaccuracies through the 5M framework (Man, Money, Method, Material, Machine), it was found that the individuals coding patient diagnoses lacked a medical records background, had not received coding training, there were no specific SOPs regarding patient referrals, and they still relied on Google for assistance when encountering new cases. There is a need to improve the quality of diagnostic coding accuracy and to conduct periodic coding audits to address potential inaccuracies in diagnostic codes, ensuring greater consistency and accuracy in the future and enhancing existing quality standards.

Keywords: *Accuracy, Patient Referrals, Medical Records, ICD-10*

Journal Homepage https://ojs.staialfurqan.ac.id/IJoASER/

INTRODUCTION

Pursuant to Minister of Health Regulation No. HK.01.0 / Menkes / 312 of 2020 concerning Professional Standards for Medical Records and Health Information Specialists, which states that the assignment of diagnosis and procedure codes to patients is to be performed by medical records and health information specialists, as the assignment of such codes is part of the competency standards for these specialists.

Coding is the process of assigning codes—using letters, numbers, or a combination of letters and numbers to represent data components. Activities, procedures, and diagnoses contained in medical records must be coded and subsequently indexed to facilitate the provision of information in support of planning, management, and research in the health sector. The purpose of diagnosing codes is to facilitate the organization and recording, collection, storage, retrieval, and analysis of health data (Arimbawa, Yunawati & Paramita, 2022).

The accuracy of patients' disease diagnosis codes plays a crucial role in the smooth delivery of health services; if codes are not assigned accurately, the resulting information will have a low level of data validity, which impacts report generation and the quality of services at Community Health Centers (Puskesmas) (Zein, Gholiyahita & Wijaya, 2024).

A preliminary study conducted in November 2024 found that there were referred patients and complaints from the Social Security Administration for Health (BPJS) and advanced-level health facilities (FKTL) regarding the assignment of diagnosis codes to referred patients at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City. However, the Ngegong Community Health Center (UPTD Puskesmas) does not compile data

on referral letters from Primary Health Care Facilities (FKTP) for patients who still have inaccurately assigned diagnosis codes. The assignment of inaccurate codes is influenced by the 5M factors (Man, Money, Method, Material, Machine), which will lead to errors in patient diagnosis data entry that may persist throughout the patient's treatment and result in a decline in the quality of service at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City.

RESEARCH METHODS

This study employs qualitative research design. The data collection methods used in this study include interviews, from which the researcher will obtain information; observations to directly observe the activities of healthcare workers as they assign diagnosis codes to referred patients; and a review of documentation to examine medical records and standard operating procedures (SOPs) for diagnosis coding.

Qualitative research is a research process aimed at understanding human or social phenomena by creating a comprehensive and complex picture that can be presented in words (Fadli, 2021). An interview is a data collection technique involving direct interaction between the researcher and research participants; in other words, an interview is a data collection technique conducted through face-to-face interaction and direct question-and-answer exchanges between the researcher and the informant. Observation is a data collection technique that involves directly observing and witnessing the behavior of research subjects or the situation where events occur. Documentary research involves collecting data from documents, archives, or other written materials related to the research phenomenon (Daruhadi & Sopiati, 2024)

RESULTS AND DISCUSSION

Accuracy Rate of Diagnostic Codes for Referred Patients at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City.

A study was conducted in March 2025 at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City. Through a review of patient referral medical records from 2022 to 2024, 44 patient referral documents were identified. The researchers also used a documentation checklist to assess the accuracy of the referral diagnosis codes by reviewing the computerized medical summaries in the SIMPUS system at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City. The results were as follows:

Table 4.1 Accuracy of Diagnosis Codes for Patient Referrals

No	Code Accuracy	Total	Percentage
1.	Accurate	26	59%
2.	Inaccurate	18	41%
	TOTAL	**44**	**100%**

Source: Data Primer, 2025

The inaccuracies in the diagnostic codes for patient referrals at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City can be examined as follows:

Table 4.2 Percentage of inaccuracies in patients' referral diagnosis codes

No	Description	Total	Percentage
1.	A misclassification in the ICD	1	6 %
2.	Error in the 4th Digit	14	78%
3.	Error in the 5th Digit	3	17%
	TOTAL	**18**	**100%**

Source: Data Primer, 2025

Based on the results of the documentation study checklist conducted by the researcher in March – May 2025 at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, there were 44 patient referral medical records from 2022–2024. The results showed that 26 (59%) of the medical records contained accurate ICD codes, while 18 (41%) contained inaccurate

ICD codes. Furthermore, the results showed 1 (6%) error in the ICD chapter classification, 14 (78%) errors in the 4th digit, and 3 (17%) errors in the 5th digit.

In healthcare, medical records are one of the most crucial elements. Based on medical records, the completeness rate of patient medical records should reach 100% and must be documented in writing—comprehensive and clear—or in electronic format, including the completeness of codes that will affect the total cost to be paid by the patient or BPJS for services (A'ayun et al., 2020). The accuracy of diagnostic information plays a crucial role in clinical information management, billing procedures, and other elements related to healthcare. The accuracy of medical records is of utmost importance; if the medical data in the records is incomplete, the resulting diagnosis codes will be inaccurate (Arimbawa, Yunawati & Paramita, 2022). Disease coding is the process of assigning or determining codes using numbers or a combination of both. This ensures that the procedures, activities, and diagnoses recorded in medical records are accurately documented. Diagnosis codes can be categorized as accurate or inaccurate. Diagnosis codes must comply with established standards and regulations for the use of ICD-10-based diagnosis codes to ensure they are considered accurate. (Ramdhani & Gunawan, 2024). The process of assigning disease codes related to diagnoses and medical procedures must adhere to correct medical terminology and the classification rules in effect in Indonesia—specifically ICD-10—to ensure the codes are precise and accurate (Puspaningtyas et al., 2022). At the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, inaccuracies in diagnosis codes still exist; thus, the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City does not yet comply with the theory proposed by Ramdhani & Gunawan (2024), which states that diagnosis codes must conform to the standards and rules established for the use of ICD-10-based diagnosis codes to ensure that these codes are considered accurate.

It is recommended that the quality of diagnostic coding accuracy be improved through periodic coding audits to address potential inaccuracies in diagnostic codes and ensure greater accuracy in the future.

Human resources (HR) involved in coding the diagnoses of referred patients at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City.

A study was conducted in March 2025 regarding the coding of diagnoses in patient referrals at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City. The human resources involved in the process of coding diagnoses for referred patients consisted of health workers, including nurses, midwives, general practitioners, and dentists—not staff from the Health Records and Information Department. Challenges were encountered when assigning diagnosis codes to patient referrals, as detailed below:

Inaccuracies were found in the diagnoses listed on patient referral forms, as detailed below:

The staff member responsible for coding patient referrals at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City has not yet corrected the inaccurate diagnosis codes, as indicated by the following information:

There is collaboration among the coding team at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City regarding several instances of inaccurate diagnosis codes in patient referrals, as indicated by the following information:

Based on observations conducted by researchers at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City in March 2025, the following results were obtained:

Table 4.3 Observation Results

No.	Aspects Observed	Yes	No
1.	Officials encountered difficulties while performing the coding process	✓	
2.	Staff members work together as a team	✓	
3.	Archival Document Storage		✓
4.	Code review by a coder	✓	

Based on the results of interviews and observations conducted by the researcher in March 2025 at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, it was found that diagnosis coding for referred patients involves human resources (HR) engaged in the diagnosis coding process for referred patients, consisting of health workers such as nurses, midwives, general practitioners, and dentists—not staff from the Health Records and Information Department. Additionally, challenges in assigning diagnosis codes include patients providing insufficiently specific information due to the high volume of services and, at times, unreliable network connectivity in the SIMPUS system. Furthermore, there is currently no process for reviewing referral patients' diagnosis codes in the event of inaccuracies; if an inaccuracy occurs, staff immediately correct it in SIMPUS. However, there is collaboration among the coding team when assigning diagnosis codes and discussions among the lead coders when new cases arise.

Decision of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES/312/2020 states that competency aspects are developed based on the seven competencies of medical records and health information personnel in accordance with the Professional Standards for Medical Records and Health Information. One of the competencies that medical records personnel must possess is classification and coding. A medical records specialist performs coding as defined herein, which involves assigning clinical classification codes in accordance with the latest International Classification of Diseases and Related Health Problems (ICD-10), as stipulated by applicable laws and regulations (Minister of Health Regulation No. 24, 2022). Medical records specialists have the authority to implement clinical classification systems and the coding of diseases and medical procedures related to health, in accordance with medical terminology (Sulastri & Sugiarsi, 2024). Issues related to health and medical procedures fall within the expertise of the Medical Records and Health Information profession. A Medical Records and Health Information Professional (PMIK) must be responsible for ensuring the accuracy of the codes for diagnoses and medical procedures that have been determined by a physician (Utomo & Hosizah, 2020). At the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, the staff responsible for diagnosing codes do not have a background in Medical Records and Health Information; thus, the Ngegong Community Health Center in Madiun City does not yet comply with the Decree of the Minister of Health of the Republic of Indonesia No. HK. 01.07/MENKES/312/2020, which states that one of the competencies required of medical recorders is classification and coding.

By improving service through effective health communication, healthcare services will provide comfort to patients or members of the public in need (Paramita, Utami, & Sari, 2020). The communication that takes place between healthcare providers and patients during the delivery of care—which is also influenced by the skills of medical staff—can affect patients' perceptions of the service (Langu, Apriyanto, & Norma, 2025). Interpersonal communication between the medical team and patients can boost patients' confidence in their recovery; thus, communicating effectively with patients helps them reduce the burden of their illness (Paramitha, Kirana, & MPR, 2022). At the Ngegong Community Health Center (UPTD Puskesmas Ngegong), challenges arise during the coding process due to patients' vague descriptions, which are often caused by the high volume of patients. Consequently, the Ngegong Community Health Center in Madiun City does not yet align with the theory proposed by Paramita, Utami, & Sari (2020), which emphasizes the importance of communication between medical staff and patients during care.

The Ngegong Community Health Center (UPTD Puskesmas) in Madiun City should issue an official decision (SK) stipulating that the person responsible for coding patient diagnoses must have a background in medical record-keeping and health information management to ensure a thorough understanding of procedures and the various disease terms used—which currently lead to inaccuracies in patient diagnosis codes. further improve communication with patients to gain a deeper understanding of the conditions they are suffering from by documenting key communication points in medical records and standardize patient diagnosis codes to ensure consistency in coding for patient referrals by providing a form to report inaccuracies in diagnosis codes should such inaccuracies occur.

Funds (Money) required to support the assignment of patient diagnosis codes at the Ngegong Community Health Center (UPTD Puskesmas).

A study was conducted in March 2025 regarding the budgeting system at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City. According to information provided by staff, as detailed below, inaccuracies in assigning patient referral codes did not affect the financing system:

> There has not yet been any training on coding diagnostic referrals for patients organized by the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, as indicated by the following information:
> This is corroborated by the results of observations conducted at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City in March 2025:

Table 4.4 Results of the Money Observation

No.	Aspects Observed	Yes	No
1.	The staff member enters the diagnosis based on the patient's medical history	✓	

Source: Data Primer, 2025

Based on the results of the research conducted by the researcher in March 2025, it was found that when coders perform diagnosis coding and inaccuracies occur in patients' diagnosis codes, this does not affect reimbursement when claims are submitted because community health centers use a capitation system, Furthermore, coding training has not yet been provided for staff responsible for diagnosing codes; however, staff are typically delegated to attend training sessions when invitations are issued by the Department of Health or other relevant agencies.

The assignment of patient diagnosis codes must follow proper coding techniques. Doctors and nurses need to collaborate and cross-check each other's work when completing medical records. Doctors are also required to attend training sessions on diagnosis coding and medical record management, and there needs to be an improvement in the accuracy of diagnosis codes in accordance with established procedures. Furthermore, all medical records staff must undergo training on diagnostic coding and medical records management (Zebua, 2022). Adequate training for coders will enhance their ability to synthesize information and assign the correct codes. Additionally, coders' experience, attention to detail, and diligence also influence coding accuracy (Maimun et al., 2019). Coding staff require in-depth knowledge to produce accurate diagnosis codes; furthermore, training is needed for coding staff to expand their knowledge of coding and to enhance and refine their skills (Rahayu et al., 2024). The Ngegong Community Health Center (UPTD Puskesmas) in Madiun City has not yet conducted specialized training for staff responsible for coding patient diagnoses; thus, the Ngegong Community Health Center in Madiun City does not yet comply with Zebua's 2022 theory, which states that staff must participate in training sessions related to diagnostic coding and medical record management, and that there is a need to improve the accuracy of disease diagnosis codes in accordance with established procedures.

According to the researcher, the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City should reallocate its budget to fund specialized coding training by setting aside funds. This would ensure the availability of funds for specialized training for staff responsible for coding patient diagnoses, thereby improving the consistency of diagnostic coding in patient referrals.

Policy (Method) on the Coding of Referred Patients at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City.

A study was conducted in March 2025 regarding the policies in place at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, and it was found that there is already a standard operating procedure (SOP) governing patient referral coding at the Ngegong Community Health Center in Madiun City, as detailed below:

However, there is currently no SOP that specifically addresses patient referral coding at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, as detailed below:

There is a general patient registration process, as well as procedures for patients seeking to extend a referral or those applying for a referral at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, as detailed below:

This is supported by the results of an observation conducted at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City in March 2025:

Table 4.5 Observation Results by Method

No.	Aspects Observed	Yes	No
1.	Staff members treat patients in accordance with procedures	✓	

Source: Data Primer, 2025

Supported by the findings of a documentary study conducted at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City in March 2025:

Table 4.6 Results of the Documentation Study

No	Aspects Observed	Yes	No	Description
1.	There are official decrees and standard operating procedures governing codification	✓		There is already an SOP
2.	There is a specific SOP that addresses coding in patient referrals		✓	The lack of specific standard operating procedures (SOPs) for patient referrals

Source: Data Primer, 2025

Based on the results of a study conducted by the researcher in March 2025 at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, it was found that Standard Operating Procedures (SOPs) regarding disease coding are already in place and that staff members understand these SOPs; however, there are currently no SOPs addressing patient referral coding. There is a specific patient workflow when a patient requests a referral: if a patient is requesting a referral for the first time, they must first see a doctor for a medical history interview, after which a diagnosis code is assigned based on the patient's symptoms. If a patient wishes to extend an existing referral or is being discharged after hospitalization, they can go directly to a nurse to have a new referral letter issued.

Standard Operating Procedures (SOPs) are crucial because they constitute a standardized set of written instructions regarding various administrative processes—specifying how and when tasks should be performed, where they should be carried out, and by whom (Antameng, Daniati, & Sumarda, 2021). SOPs serve as guidelines for staff in completing their tasks and help reduce errors during task execution (Rahayu et al., 2024). The referral system regulates the flow of where a person with a specific health issue should go to receive medical care (Ratnasari, 2017). At the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, there is currently no specific SOP for patient referral coding; thus, the Ngegong Community Health Center in Madiun City does not yet align with the theory proposed by Antameng, Daniati, & Sumarda (2021), which states that standard operating procedures are a crucial component of a standardized set of written instructions regarding various administrative processes.

According to the researchers, the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City should establish specific SOPs for diagnosing and coding patient referrals to serve as guidelines for staff performing healthcare services.

The form or medium (Material) used by coders when recording the diagnosis of referred patients.

A study was conducted in March 2025 regarding the facilities and infrastructure used by coding staff at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City when issuing referral letters for patients, which still rely on physical paper documents, as detailed below:

This is supported by the results of observations conducted at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City in March 2025:

Table 4.7 Observation Results for Materials

No.	Aspects Observed	Yes	No
1.	A referral letter in the form of a printed document	✓	

Source: Data Primer, 2025

Based on the results of a study conducted by researchers in March 2025, it was found that coders working at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City used physical paper documents to record patient referral diagnoses; these documents were then given to the patients, who would take the referral letters to higher-level healthcare facilities.

Referral letters are created to assist patients in situations that cannot be managed by primary-level healthcare facilities by directing them to higher-level healthcare facilities that have specialists capable of treating those conditions; patient information on the referral letter is clearly written because it is in printed form (Lakoro, Kepel, & Tendean, 2021). Referral letters are provided to facilitate the transfer of patients with conditions that cannot be managed by primary-level healthcare facilities to advanced-level healthcare facilities that have specialists capable of treating those conditions (Khairunnisyah & Heltiani, 2022). A referral letter serves as a tool used to convey information, to support or reinforce a statement. A referral can serve as evidence, convey values, or establish credibility (Awalludin, Indrawan, & Malfiany, 2022). At the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, the practice aligns with the 2021 theory by Lakoro, Kepel, & Tendean, which states that the patient's identity on the referral letter is clearly documented because it is in printed form.

It is recommended that the coding staff responsible at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City continue to maintain the existing quality standards in order to improve services for patients who are requesting referral letters for their subsequent treatment.

Equipment (Machines) used to ensure the accuracy of coding for referred patients at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City.

A study was conducted in March 2025 regarding the diagnosis coding process at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, which is currently carried out electronically. The use of an electronic system in the process of coding patient diagnoses aims to improve the efficiency, accuracy, and integrity of medical data. With this integrated system, the recording and reporting of diagnoses become faster, easier to trace, and minimize human error in data entry, as detailed below:

> At the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, the diagnosis coding process is carried out directly by staff using the SIMPUS application. By utilizing this system, staff can enter and code patient diagnosis data directly and in a timely manner, thereby streamlining workflows and improving the accuracy and efficiency of medical record-keeping, as outlined in the information below:
>
> Regarding the use of ICD-10, coders at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City rarely use it, as indicated by the information below:
>
> Regarding reference materials used by coders at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, most staff members primarily use

Google to search for information in order to save time during patient care, as indicated by the information below:

Supported by the findings of an observation conducted at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City in May 2025:

Table 4.8 Machine Observation Results

No.	Aspects Observed	Yes	No
1.	Staff members enter patient data based on the patient's identification information.	✓	
2.	Staff enter diagnoses into SIMPUS	✓	
3.	Staff members use the ICD-10 manual	✓	

Source: Data Primer, 2025

Based on the results of a study conducted by researchers in March 2025 at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, it was found that the diagnosis coding process at the Ngegong Community Health Center in Madiun City is currently carried out electronically. The use of an electronic system in the process of coding patient diagnoses aims to improve the efficiency, accuracy, and integrity of medical data. With an integrated system, the recording and reporting of diagnoses become faster, easier to trace, and minimize human error in data entry. At the Ngegong Community Health Center (UPTD), the diagnosis coding process is carried out directly by staff using the SIMPUS application. All coding staff are now able to enter patient diagnosis codes into their respective SIMPUS systems; however, specifically in the dental clinic, the patient's Informed Consent form is still filled out manually to obtain the patient's signature of consent for the procedure. Coding staff at the Madiun City UPTD use their own notes of frequently used diagnosis codes when referring patients. Regarding reference materials used by coding staff at the Ngegong Community Health Center UPTD in Madiun City, on average, staff use Google to search for information, aiming to save time during patient care.

By using ICD-10, all terms and categories of diseases that affect health will be standardized worldwide. Diagnosis coding must be complete and accurate in accordance with ICD-10 guidelines (Pramono et al., 2021). This collection of terminology, symptoms, and procedures, where disease terms and health condition terms must align with those used in the disease classification system, which groups similar diseases and procedures into a single group of disease codes and procedure codes. A comprehensive and internationally recognized classification system is known as the International Statistical Classification of Diseases and Related Health Problems (ICD) (Haq, Mandia, and Oktavia, 2021). At the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, coders still rely on Google searches to save time during patient care; thus, the Ngegong Community Health Center in Madiun City does not yet align with the theory proposed by Pramono et al. (2021), which states that diagnostic coding must be complete and accurate in accordance with ICD-10 guidelines.

It is recommended that coders continue to use ICD-10 and document the coding results, which can serve as a reference for new cases involving the patient's diagnosis codes, thereby improving the consistency of patient diagnosis coding.

CONCLUSIONS

Based on the results of the study, it was concluded that regarding the accuracy of diagnosis codes in patient referrals at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, out of 44 medical records, 26 (59%) were accurate and 18 (41%) patient referral medical records were inaccurate. This was determined by reviewing 1 (6%) inaccurate diagnosis code caused by an incorrect ICD chapter; 14 (78%) cases involved errors in the use of the fourth digit; and 3 (17%) cases involved errors in the use of the fifth digit. In terms

of human resources (Man) involved as the person in charge of coding for patient referrals at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City, this role is not filled by medical recorders or health information specialists, and the coding of diagnosis codes has not yet been carried out accurately. In terms of budget (Money), specialized training for the coders at the Ngegong Community Health Center (UPTD Puskesmas) in Madiun City has not yet been implemented. Regarding policy (Method), while standard operating procedures (SOPs) for coding already exist, there are no specific SOPs related to coding for patient referrals. Regarding the patient workflow for those seeking to extend or request a referral at the Ngegong Community Health Center (UPTD) in Madiun City, the process aligns with regulations: after an examination, patients are referred to a facility where they can continue their treatment. In terms of materials, there is physical evidence in the form of printed patient referral forms, which are provided to patients requesting a referral letter. In terms of infrastructure (machinery), electronic medical records in accordance with Ministry of Health Regulation No. 24 of 2022 have been implemented at the Ngegong Community Health Center (UPTD) in Madiun City; however, coding staff still rely on Google to code patient diagnoses.

The researcher recommends improving the accuracy of diagnosis coding and conducting periodic coding audits to address potential inaccuracies in diagnosis codes. The Ngegong Community Health Center (UPTD Puskesmas) in Madiun City should issue an official decision (SK) stipulating that the personnel responsible for coding patient diagnoses must have a background in medical recordkeeping and health information management. Communication with patients should be enhanced to gain a deeper understanding of the conditions they are suffering from, by documenting key points of these conversations in the medical records. Staff responsible for diagnosis coding should compile a summary of patient diagnosis codes to ensure consistency in assigning codes for patient referrals by providing a form to report diagnosis code inaccuracies should any patient's diagnosis code be found to be inaccurate. The Ngegong Community Health Center (UPTD Puskesmas) in Madiun City should reallocate funds to manage a specialized coding training budget; this will ensure funds are available for specialized training of staff responsible for patient diagnosis coding, thereby improving the consistency of diagnosis coding in patient referrals.

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