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Relevance Of Students Competencies and Health Information in Medical Records at The Level with The Minister of Health Regulation Number 312 Of 2020

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ABSTRACT

Universities are expected to provide graduates whose skills correspond with professional and regulatory requirements. In the domain of Medical Records and Health Information (PMIK), competency standards are officially governed by Minister of Health Regulation No. 312 of 2020, which establishes a criterion for service quality and professional efficacy. This study seeks to evaluate the correspondence between the abilities of final-year students in the 2024–2025 Medical Records and Health Information (RMIK) program at STIKes Sihat Beurata Banda Aceh and the established national criteria. A descriptive quantitative approach was utilised, encompassing all 69 final-year students via a complete sample method. The demographic profile reveals that the majority of respondents were 20 years old (52%) and primarily female (70%). The comprehensive competency evaluation indicates that the majority of students are classified as "good" (69%). Student competencies are predominantly assessed as high in relation to the national benchmark. Nonetheless, certain domains necessitate focus, including data management (8%) and codification (2%), which were predominantly assessed as “poor”. The findings indicate that although overall competency levels are adequate and meet regulatory standards, specific enhancements are required in some technical areas. Enhancing these areas is crucial to guarantee thorough professional standards in alignment with established PMIK criteria.

1. Introduction

Higher education plays a crucial role in preparing human resources for entry into the workforce. High-quality higher education institutions are expected to produce a high-quality workforce with a strong opportunity to excel in the job market. Higher education institutions are required to produce professional and high-quality output. The workplace requires a reliable and competent workforce to ensure professional performance is carried out ethically, requiring a thorough understanding of codes of ethics and professional responsibilities (Jacobs et al., 2021). The competency of graduates in each study program at higher education institutions needs to be improved (Abidin, 2025). Therefore, every university graduate must possess qualities that meet the qualifications required by current needs and developments.

In today's era of globalization and modernization, the world of work is evolving rapidly and increasingly requires a reliable and competent workforce to meet market needs. The goal is to ensure that professional

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performance can be carried out with proper ethics, considering the high standards of service, particularly in the healthcare sector, which requires a deep understanding of codes of ethics and professional responsibility (Sohrabi et al., 2024). The dynamics of the workplace itself require graduates who are qualified, competent, high-achieving, and able to communicate effectively. Efforts in this context are expected to create a superior workforce with significant opportunities in the workforce.

Based on Minister of Health Regulation No. 312 of 2020 concerning Professional Standards for Medical Records and Health Information, it is emphasized that Medical Records and Health Information (PMIK) professionals in every healthcare facility are required to provide professional health information services that are oriented towards the health information needs of healthcare providers. These professional standards are intended to serve as guidelines for Medical Records and Health Information Officers in providing measurable, standardized, and high-quality Medical Records and Health Information services in healthcare facilities. The quality of service in a hospital depends, in part, on the availability and skills of the institution's human resources. (Pengabdian et al., 2024). The competencies of medical recorders are (1). Noble professionalism, ethics, and legality. (2). Self-awareness and self-development. (3). Effective communication. (4). Health data and information management. (5). Clinical classification skills, codification of diseases and other health problems, and clinical procedures. (6). Application of health statistics, basic epidemiology, and biomedicine. (7). Management of RMIK services (Ministry of Health Regulation, 2020).

Health workers play a crucial role in improving the quality of health services provided to the community. Motivated and trained health workers can adapt and expand primary care services, thereby improving the quality, reach, and performance of programs (Godana et al., 2025). Spigel et al., (2025) Standardized health service competencies, actively participating in training or guidance, determine quality and provide ongoing consistency to the community. Medical health workers directly determine the quality of care, patient satisfaction, and outcomes, and influence decisions such as discharging patients against medical advice (Albataineh & Ghaith, 2024).

The implementation of health services must be carried out responsibly, with high ethics and morals, expertise, and authority that are continuously improved through ongoing education and training (Ministry of Health Regulation, 2020). Health workers must have competence, which is a person's ability to carry out tasks and responsibilities in the work environment, which includes knowledge and skills in improving professional performance standards (Dian Rizki Indriartanti, Totok Subianto, Suhartini, 2025).

Previous research by Salsabila & Rumana (2024) on the competency profile of medical records and health information students at Esa Unggul University found that 51.3% of students in clinical classification skills, disease and other health problem codification, and clinical procedures were found to be competent, while 48.7% were incompetent. Competence in health statistics application, basic epidemiology, and biomedical sciences was 49.9%, while 50.1% were incompetent. Competence in medical records and health information service management was 50.3%, while 49.7% were incompetent.

Based on the author's initial observations of final-year students in the 2024-2025 academic year, 100% were found to be competent. Self-awareness and development were 100%, and effective communication was 100%, respectively. Health data and information management was 50%, and 50% were incompetent. Coding diseases and other health problems and procedures was 50%, respectively. Competency in health statistics applications, basic epidemiology, and biomedical sciences was found to be competent at 60%. Competency in RMIK service management was found to be competent at 70%.

This situation raises concerns regarding the extent to which students are prepared to face the world of work, which demands competency standards in accordance with Ministerial Regulation No. 312 of 2020. Therefore, it is necessary to investigate the relevance of medical records and health information students' competencies to the needs of the workforce. Based on the above background, the author is interested in further examining the relevance of the competencies of final-year students in the Medical Records and Health Information Study Program at STIKes Sihat Beurata Banda Aceh to Ministerial Regulation No. 312 of 2020.

Based on the background described, the research problem focuses on the characteristics, competencies, and relevance of final-year Medical Records students' competencies to Ministerial Regulation No. 312 of 2020.

2. Methodology

The type of research to be used is descriptive with a quantitative approach. Quantitative descriptive is a research method that aims to describe variables objectively using numerical data (Ruhdila, 2024). Firmansyah, (2022) defines quantitative research as research conducted to answer research questions by following scientific principles: concrete/empirical, measurable, rational, and systematic, with research results obtained in numerical form and analysed using statistical methods. One classification of quantitative research is descriptive. Descriptive research aims to observe the phenomenon occurring within a specific population. This research was conducted at the Sihat Beurata Health College (STIKes). This research was conducted during the even semester of the 2025/2026 academic year.

The population in this study was all final-year students of the Medical Records and Health Information, totalling 69 students. The sample consisted of final-year students from the 2024-2025 academic year, consisting of 34 students from level 3A and 35 students from level 3B. Using the total sampling technique, the sample size, or respondents, was 69 final-year students.

The research instrument used for data collection was a questionnaire, which respondents had to complete according to the instructions. This data was obtained from original sources, namely respondents or informants related to the research variables. The data analysis technique used in this study was univariate analysis. According to Ruhdila, (2024), univariate analysis is an analysis that involves calculating the frequency distribution and percentage of the variables in the study using the following data processing formula:

$$p = \frac{f}{n} x\ 100\%$$

Which are: p = Percentage (the result, expressed in %)
f = Frequency (the number of occurrences of a particular category or response)
n = Total number of observations or respondents

3. Results

The research on the Relevance of Final Year Student Competencies in the Medical Records and Health Information Study Program of 2024-2025 with Minister of Health Regulation Number 312 of 2020 obtained data by distributing questionnaires directly to students. Based on the data collection and processing, the research results can be seen in the following table and narrative.

3.1 Characteristics of Final Year Students in 2024-2025

The results of data processing on the characteristics of final year students in the 2024-2025 Medical Records and Health Information study program can be seen in the following table:

Table 1. Frequency distribution of characteristics of final year students in 2024-2025

No.	category		Frequency	Percentage
1	Age	20 years old	36	52%
		21 years old	26	38%
		22 years old	7	10%
Total			69	100%
2	Gender	Man	21	30%
		Woman	48	70%
Amount			69	100%

Table 4.1 reveals that the majority of final-year students in the 2024–2025 Medical Records and Health Information program are 20 years old, comprising 36 persons (52%). Regarding gender distribution, female students constitute 48 individuals (70%), and male students account for 21 individuals (30%). This pattern illustrates a prevalent demographic trend noted in health education studies, characterised by a predominance of younger cohorts and females.

3.2 Final Year Student Competencies for 2024-2025

The findings from the data analysis about the competences of final-year students in the 2024–2025 Medical Records and Health Information program are presented in the following table:

Table 2 Frequency distribution of final year student competencies in 2024-2025

No.	Category		Frequency	Percentage
1	7 PMIK Competencies	Very Good	89	18%
		Good	331	69%
		Fairly Good	55	11%
		Not Good	8	2%
		Not Good	0	0
Amount			483	100%

According to Table 4.2, the competency levels of final-year students in the 2024–2025 Medical Records and Health Information program are primarily categorized as “good,” with 331 responds (69%).

3.2 Relevance of Final Year Student Competencies in 2024-2025 with Minister of Health Regulation No. 312 of 2020

Table 3 Frequency Distribution of Relevance of Noble, Ethical and Legal Professionalism Competencies

No.	Category		Frequency	Percentage
1	Competency 1	Very Good	95	46%
		Good	109	53%
		Fairly Good	3	1%
		Not Good	0	0
		Not Good	0	0
Amount			207	100%

According to Table 4.3, the correlation between the professional competencies of RMIK students and Minister of Health Regulation No. 312 of 2020 is mostly classified as "good," with 109 affirms (53%).

Tabel 4. Frequency Distribution of the Relevance of Self-Awareness and Self-Development Competencies to Minister of Health Regulation No. 312 of 2020

No.	Category		Frequency	Percentage
1	Competency 2	Very Good	46	22%
		Good	145	70%
		Fairly Good	16	8%
		Not Good	0	0
		Not Good	0	0
Amount			207	100%

From Table 4.4, the relevance of RMIK students' self-awareness competency to Minister of Health Regulation No. 312 of 2020 is primarily categorised as "good," with 145 responses (70%).

Table 5 Frequency Distribution of Relevance of Effective Communication Competence

No.	Category		Frequency	Percentage
1	Competency 3	Very Good	37	18%
		Good	147	71%
		Fairly Good	23	11%
		Not Good	0	0
		Not Good	0	0
Amount			207	100%

Based on table 4.5, it is known that the majority of RMIK students' level of relevance in effective communication competencies with Minister of Health Regulation No. 312 of 2020 is in the "good" category with 147 answers (71) %.

Table 6 Frequency Distribution of Relevance of Health Data and Information Management Competencies

No.	Category		Frequency	Percentage
1	Competency 4	Very Good	16	8%
		Good	133	64%
		Fairly Good	58	28%
		Not Good	0	0
		Not Good	0	0
Amount			207	100%

Based on table 4.6, it is known that the majority of RMIK students' level of relevance in data management competencies with Minister of Health Regulation No. 312 of 2020 is in the "good" category, amounting to 133 students (64%).

Tabel 7 Frequency Distribution of Relevance of Disease and Health Problem Coding Competencies

No.	Category		Frequency	Percentage
1	Competency 5	Very Good	5	2%
		Good	92	44%
		Fairly Good	110	53%
		Not Good	0	0
		Not Good	0	0
Amount			207	100%

Based on table 4.7, it is known that the majority of RMIK students' level of relevance in disease coding competency with Minister of Health Regulation No. 312 of 2020 is in the "quite good" category with 110 answers (53%).

Table 8 Frequency Distribution of Competence Relevance of Statistics Application, Basic Epidemiology and Biomedicine

No.	Category		Frequency	Percentage
1	Competency 6	Very Good	32	15%
		Good	141	68%
		Fairly Good	34	16%
		Not Good	0	0
		Not Good	0	0
Amount			207	100%

Based on table 4.8, it is known that the majority of RMIK students' level of relevance in statistical competency with Minister of Health Regulation No. 312 of 2020 is in the "good" category with 141 answers (68%).

Table 9 Frequency Distribution of Relevance of RMIK Service Management Competencies

No.	Category		Frequency	Percentage
1	Competency 7	Very Good	91	44%
		Good	101	49%
		Fairly Good	15	7%
		Not Good	0	0
		Not Good	0	0
Amount			207	100%

Based on table 4.9 above, it is known that the majority of the level of relevance of Medical Records and Health Information students in RMIK service management competencies with Minister of Health Regulation No. 312 of 2020 is in the "good" category with 101 answers (49%).

4. Discussion

4.1 Characteristics of Final Year Students in 2024-2025

The research results show that 36 (52%) final-year students in the Medical Records and Health Information study program in 2024-2025 were 20 years old, 26 (38%) were 21 years old, and 7 (10%) were 22 years old. These results indicate that the majority of students are 20 years old, at 52%. Of the final-year students in the Medical Records and Health Information study program in Sihat Beurata Banda Aceh College of Health Sciences (STIKes), 48 (70%) were female, and 21 (30%) were male. These results indicate that the majority of students are female.

According to Hajati et al., (2018) characteristics are a distinctive trait inherent in a person. According to Lainsamputty, dkk (2023) student characteristics can consist of age and gender. Furthermore, Salsabila & Rumana (2024) the competency of Medical Records and Health Information Students at Esa Unggul University, it is known that the majority of students are female (73.6%) and the majority of students' ages are < years (63.7%). In this study, the authors assume that the majority of students, not only students at STIKes Sihat Beurata Banda Aceh but also at other universities, are dominated by female students, and the age range of the majority of students is in their early 20s.

4.2 Final Year Student Competencies for 2024-2025

Based on the results of data processing from 69 students regarding 7 statements referring to the competency standards for medical records and health information, a total of 483 answers were obtained. From all the answers, it shows that the competency of final year students in the 2024-2025 Medical Records and Health Information study program is in the "very good" category with 89 answers (18%), the "good" category with 331 answers (69%), the "quite good" category with 55 answers (11%), the "less good" category with 8 answers (2%) and there are no answers in the "not good" category.

Sombolinggi et al., (2024) defines competence as a person's ability to perform tasks effectively and efficiently. Competence emphasizes identifiable and measurable aspects of character, skills, and abilities. According to Ainanur & Tirtayasa (2018) competence is the ability to carry out or perform a job or task based

on skills and knowledge and supported by the work attitude required by the job. This aligns with Minister of Health Regulation Number 312 of 2020, which stipulates that healthcare workers in their practice are required to provide healthcare services in accordance with professional standards.

The results of a study of final-year students in the Medical Records and Health Information study program (2024-2025) suggest that overall student competence is in the good category. The majority of responses in the "good" category indicate a strong understanding of applicable professional standards. However, although overall achievement is high, specific strengthening in areas that are not yet high is necessary so that student competency development can be achieved across all competencies.

4.3 The Relevance of Final Year Student Competencies to Minister of Health Regulation No. 312 of 2020

4.3.1 The Relevance of Noble Professionalism, Ethics and Legal Competence

Based on the results of data processing from 69 students on 3 statements, a total of 207 answers were obtained. From all the answers, it shows that the professionalism competency of final year students in the 2024-2025 Medical Records and Health Information study program is in the "very good" category with 93 answers (46%), the "good" category with 109 answers (53%), the "quite good" category with 3 answers (1%), and there are no answers in the "less good" and "not good" categories. This first competency area is the area with the highest competency value of the other 7 competencies. The highest percentage is in the statement regarding the ability to make religion a moral value.

Based on previous research by Karmanto et al., (2023) it was stated that 56.3% of respondents received good scores for PMIK. This is in line with research conducted by Nuryati et al., (2018) Evaluation of Competency Achievement Among Medical Records and Health Information Staff at City Hospitals evaluating the Achievement of Medical Records and Health Information Competencies at Yogyakarta City Hospitals based on the Self-Assessment Method, which stated that the highest PMIK competency was in the area of noble professionalism competency with a score of 81%. Furthermore, the relevance of noble professionalism, ethics, and legal competencies in medical records students lies in their ability to integrate ethical and legal values in practice, support accurate and secure patient information management, and meet high service standards for patient safety and justice (Said, 2020). Ghellai et al., (2018) emphasized that these competencies are essential for managing accurate and complete medical records, which not only meet professional and legal requirements but also contribute to health care quality control and prevent medical errors. Furthermore, Savitri et al., (2025) emphasized that relevant competencies are essential for carrying out tasks with high quality, complying with legal regulations, and upholding ethics in managing health information. These competencies are key to maintaining integrity and trust in health services.

4.3.2 The Relevance of Self-Awareness and Self-Development Competencies

Based on the results of data processing from 69 students on 3 statements, a total of 207 answers were obtained. From all the answers, it shows that the self-awareness competency of final year students in the 2024-2025 Medical Records and Health Information study program is in the "very good" category with 46 answers (22%), the "good" category with 145 answers (70%), the "quite good" category with 16 answers (8%), and there are no answers in the "less good" and "not good" categories. The highest percentage is in the statement facing technological changes in the field of Medical Records and Health Information.

According to Fatima, (2023) a PMIK must be able to adapt to developments in knowledge. This requires PMIK to upgrade themselves to compete and meet their competency targets. This aligns with Minister of Health Regulation No. 312 of 2020, which states that PMIK must be meticulous, thorough, and develop new knowledge. Previous research conducted by Salsabila dan Rumana (2024) the competencies of Medical Records and Health Information Students at Esa Unggul University indicated that 63% of students received good scores in the self-awareness and self-development competency. Another study conducted Karmanto et al., (2023) "The Competencies of Medical Records and Health Information at Specialized Hospital X in 2021," also found that many respondents scored "good" in this competency, amounting to 59.1%.

In this study, the researchers assumed that the majority of final-year students in the Medical Records and Health Information demonstrated a high level of understanding of the self-awareness and self-development competency. The majority of responses fell in the "good" category, indicating a strong understanding of professional standards. These results indicate that the majority of students adhered to the standards

stipulated in Minister of Health Regulation Number 312 of 2020. However, 16 responses fell in the "fair" category. Judging from the results of data processing, improvements need to be made to the ability to apply basic learning skills such as literature searches.

4.3.3 Relevance of Effective Communication Competence

Based on the results of data processing from 69 students on 3 statements, a total of 207 answers were obtained. From all the answers, it shows that the effective communication competency of final year students in 2024-2025 is in the “very good” category with 37 answers (18%), the “good” category with 147 answers (71%), the “quite good” category with 23 answers (11%), there are no answers in the “less good” and “not good” categories. The question with the highest percentage is in the statement regarding communication skills with medical personnel and other parties.

Communication skills are essential in life, especially in the workplace. These skills enable individuals to convey messages clearly and concisely. This aligns with Minister of Health Regulation No. 312 of 2020, which states that one of the PMIK competencies is being able to communicate with work partners and the public. Communication skills are crucial too for healthcare professionals, influencing patient outcomes, healthcare team effectiveness, and overall quality of care. Research shows that effective communication improves patient outcomes, particularly in the management of chronic diseases such as diabetes and hypertension (Yao et al., 2021); communication training for healthcare professionals has been shown to impact patient experiences and clinical outcomes (Quigley et al., 2021). Clear and empathetic communication improves patient satisfaction and builds trust between patients and providers, which positively impacts adherence to care plans. Furthermore, effective communication strengthens team cohesion and collaboration in healthcare settings, resulting in higher job satisfaction among healthcare professionals and improved quality of care. Research supports the need for structured education in communication skills to improve interactions among team members and overall clinical performance.

4.3.4 Relevance of Health Data and Information Management Competencies

Based on the results of data processing from 69 students on 3 statements, a total of 207 answers were obtained. From all the answers, it shows that the data management competency of final year students in the 2024-2025 Medical Records and Health Information study program at STIKes Sihat Beurata Banda Aceh is in the "very good" category with 16 answers (8%), the "good" category with 133 answers (64%), the "quite good" category with 58 answers (28%), there are no answers in the "less good" category and the "not good" category. The questions with the highest percentage are in statements regarding the management of BOR, BTO, TOI, GDR, NDR and AVLOS data.

Given the increasingly complex and data-driven context of healthcare services, it is crucial for medical personnel to possess strong health data and information management skills. Proper management can improve service delivery, operational efficiency, and patient safety in the modern era where health information is crucial. Improving the Quality of Healthcare Services: Integrated health information management is a crucial step in improving the quality of care provided to patients. Medical personnel and staff can provide better care by gaining easy access to relevant data, such as patient health histories and prior treatment history, through comprehensive health information management (Nurjannah et al., 2022). By having access to the right data, medical personnel can make more informed and evidence-based decisions. Ultimately, this will result in better patient health outcomes. Furthermore, research by Nurjannah et al., (2022) emphasized how hospital information reporting and financing can be impacted by errors in incorrect diagnosis coding. Therefore, the data needed to evaluate service quality will be more accurate if medical personnel are more proficient in managing health information and medical records. Clinical Process Efficiency: Electronic medical records (EMRs) are gaining popularity in healthcare facilities, such as hospitals. EMRs enable the collection, processing, and analysis of digital data, making patient monitoring easier and information more accessible throughout the clinical process. Surya et al., (2025) stated that implementing EMRs in community health centers is crucial for more efficient and secure health information management. Furthermore, implementing EMRs accelerates clinical workflows, resulting in more satisfied patients and more efficient healthcare facilities.

The goal of health data and information management is patient safety. A study by Doni, (2024) showed that patient safety and the quality of hospital services improve when medical record information is well-managed. An accurate and transparent system is needed to help healthcare workers make informed decisions, as misinformation can lead to problems and malpractice. Educational institutions and hospitals should invest more resources in training healthcare workers, as health data and information management skills are crucial. Addressing current challenges in healthcare can be achieved by adopting information technology and sound management systems. Comprehensive training can help medical personnel understand how to better manage information, which will have a direct impact on the quality of services they provide.

4.3.5 Relevance of Disease Coding Competencies, Health Problems and Clinical Procedures

Based on the results of data processing from 69 students on 3 statements, a total of 207 answers were obtained. From all the answers, it shows that the disease codification competency of final year students in the 2024-2025 Medical Records and Health Information study program at STIKes Sihat Beurata Banda Aceh is in the "very good" category with 5 answers (2%), the "good" category with 92 answers (44%), the "quite good" category with 110 answers (53%), there are no answers in the "less good" and "not good" categories. The highest percentage is in the statement regarding the ability to use medical terminology in the classification and codification of diseases.

According to Minister of Health Regulation Number 312 of 2020, a PMIK must be able to understand medical terminology, disease classification, disease codification, and apply basic pharmacology in classifying and codifying diseases. In line with this, research conducted by Meilany (2020) states that the impact of writing an inaccurate diagnosis code is on health care costs and hospital report information, which can impact the accuracy of planning and decision-making. Therefore, the assignment of disease diagnosis codes and procedures must be carried out in accordance with established standards.

The findings of this study align with those of Robinson et al., (2025) which showed that the competence of coding diseases, health problems, and clinical procedures is relevant as a skill, specifically focused on the domain of clinical classification. Coding competence is crucial because the quality of the code determines the reliability of diagnostic estimates: the specificity of coded data is usually very high, although sensitivity is often lower (Hogans et al., 2023). Furthermore, Shepheard & Groom, (2020) emphasized that the competence of coding diseases, health problems, and clinical procedures ensures the accuracy and quality of data for reporting, billing, surveillance, and service management, enables the utilization of coding-assistive technologies, and helps professionals adapt to the complexity of the health system.

The analysis above shows that the disease coding competency of final-year students is generally in the good to excellent category, particularly in the use of medical terminology as the basis for classification and coding. This achievement reflects compliance with the competency requirements stipulated in Minister of Health Regulation Number 312 of 2020. Strengthening practice-based learning, precision in the application of classification standards, and the use of supporting technology are strategic steps to improve coding accuracy. Therefore, graduate competency must be able to produce health data as a basis for reporting, financing, and decision-making in an accurate and reliable healthcare system.

4.3.6 Relevance of Competence in Health Statistics Application, Basic Epidemiology and Biomedicine

Based on data processing from 69 students, a total of 207 responses were obtained for each of the three statements. The overall responses indicate that the statistical competency of final-year students in the Medical Records and Health Information study program (2024-2025) at STIKes Sihat Beurata Banda Aceh falls into the "very good" category (32 responses (15%), "good" (141 responses (68%), and "fair" (34 responses (16%). There were no responses in the "poor" or "bad" categories. The highest percentage was found in the ability to use the SIMRS application.

The knowledge required to support this competency includes statistics, biostatistics, epidemiology, and presentation formats. This is as stated in Minister of Health Regulation Number 312 of 2020, which states that PMIK is capable of collecting service data; analyzing statistics in tables, graphs, diagrams, and other forms; and presenting morbidity and mortality information.

Previous research by Salsabila dan Rumana (2024) which examined the Competency Overview of Medical Records and Health Information Students at Esa Unggul University, stated that 49.9% of students received good scores in health statistics applications. Research by Karmanto (2023) stated that 53.1% of respondents received good scores in this competency, while 46.9% received poor scores. Both studies showed a slight difference between respondents with high and low competency scores. Chen et al., (2024) found that this technology integration successfully addressed challenges related to data quality, model interpretation, bias, privacy, and equity. Furthermore Dian Rizki Indriartanti, Totok Subianto, Suhartini, (2025) found no correlation between competency and performance of medical recorders and health information at the Cirebon district community health center.

Improving the competency of Medical Records and Health Information students and staff needs to be a primary focus for educational institutions and healthcare stakeholders. However, gaps remain that require strengthening, particularly in addressing the demands of technological advancements and the complexity of health information management. Therefore, developing a curriculum relevant to professional standards, enhancing technology-based practices, and enhancing contextual field experiences require ongoing efforts. With these steps, RMIK graduates are expected to possess comprehensive, adaptive competencies and be able to make optimal contributions to improving the quality of healthcare services.

4.3.7 Relevance of Competencies in Medical Records and Health Information Management Services

Based on the results of data processing from 69 students on 3 statements, a total of 207 answers were obtained. From all the answers, it shows that the service management competency of final year students in the 2024-2025 Medical Records and Health Information study program is in the "very good" category with 91 answers (44%), "good" category with 101 answers (49%), "quite good" category with 15 answers (7%), there are no answers in the "less good" category and the "not good" category. The highest percentage is in the statement regarding archiving medical records.

The existence of this system is an effective solution in facilitating medical services (Mariana & Lukman, 2025). The medical records service system aims to provide information that facilitates the management of patient care and facilitates management in planning, organizing, implementing, and monitoring activities. This is as stipulated in Minister of Health Regulation No. 312 of 2020, which states that a PMIK is capable of manually and electronically identifying patients, maintaining quality, and managing the archiving of medical records both manually and electronically.

The findings of this study are in line with the results of research by Salsabila & Rumana (2024) which stated that students with medical record and health information (RMIK) service management competencies who obtained good results were 50.3% of students, while students with poor competencies were 49.7% of students (Afif & Suwandari, 2019). Management of health data in hospitals in the medical record information system contributes to improving employee competence, while technology integration provides effective solutions for management. (Sombolinggi et al., 2024). Therefore, it can be concluded that the importance of managerial competence in monitoring and improving the performance of organizational leaders and managers has been widely accepted.

4. Conclusions

Based on the results of research on the Relevance of Final Year Student Competencies of the 2024-2025 Medical Records and Health Information with the Minister of Health Regulation Number 312 of 2020, the majority of final year students of 2024-2025 are 20 years old (52%), the majority of whom are female (70%). Student Competencies have answers in the "good" category, namely 331 answers (69%). The level of relevance of Student Competencies with the Minister of Health Regulation No. 312 of 2020 varies in the high "very good" category, namely Noble professionalism, ethics and legality 46%; Self-awareness and self-development 22%; Effective communication 18%; Application of health statistics, basic epidemiology and biomedical 15%; Management of Medical Records and Health Information (RMIK) services 44%. Meanwhile, the other two areas that have a low level of competency relevance to the Minister of Health Regulation Number 312 of 2020 obtained a low "very good" category, namely data management and service information at 8%; codification of diseases and other health problems and clinical procedures at 2%. The results of the study are expected to enable students to maintain and improve their knowledge and skills at high competency levels. For

competencies that are still low, students are expected to learn independently, such as identifying material that has not been mastered and seeking additional references. Students can also be more active in discussions with lecturers to clarify concepts that are not yet understood and discussions with colleagues, such as forming study groups to deepen understanding. Educational institutions are advised to use the results of this study as a consideration in optimizing the implementation of field work practice activities. This optimization can be done by ensuring that students are directly involved in the entire workflow, especially in competencies that have not yet achieved maximum results.

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