

THE IMPLEMENTATION OF “E-MANAJEMEN PENYIDIKAN” IN INCREASING CRIME CLEARANCE TO REDUCE CRIME PERCENTAGE

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ABSTRACT

This study examines the impact of the E-Manajemen Penyidikan (E-MP) system on crime clearance rates. The E-MP system, a web-based application, is designed to streamline investigative processes and enhance the efficiency of law enforcement agencies. Analyzing the findings through suitable theories; Management Information System, Legal Certainty, and Perkabareskrim No.1 of 2022. Employing a qualitative research approach, this study explores the experiences of police officers in utilizing the E-MP system. The findings suggest that the E-MP system has the potential to significantly improve crime clearance rates by facilitating data-driven decision-making, enhancing collaboration among investigators, and streamlining administrative tasks. However, the successful implementation of the E-MP system hinges on factors such as adequate training, technical support, and supportive organizational culture. This study contributes to the growing body of research on the use of technology in law enforcement and provides valuable insights for policymakers and practitioners seeking to improve the effectiveness of criminal investigations.

Keywords: E-MP, Crime Clearance Rate, Investigative Process, Criminal Investigation

I. INTRODUCTION

Public satisfaction towards public service is often influenced by the Police's ability to maintain safety and order. The public perceptions are favorable if the Crimes are low along with a high percentage of crime clearance rate (CC). On the contrary, a high crime rate and slow response to reports can reduce public trust in the police institution to carry out their duties. Thus, improvements in Crime Clearance Rate are crucial in establishing the reputation and legitimacy of the police.

Crime clearance (CC) is the percentage of criminal offences solved by the police, mainly related to crimes handled by the Investigation Unit. Crime clearance is closely aligned with Crime Total (CT), which is the number of crimes that occurred based on reports to the police from the public or events where the criminal caught red-handed by officers (Hadiyatullah, Oktavianto, & Faruq, 2019: 1). Crime clearance also has a close relation with crime suppression. The higher the CC percentage, the lower the crime rate. This can also serve as a preventative measure for potential criminals who are aware of the high risk of being caught. Re-emphasizing the importance and urgency of the Criminal Investigation Unit to take strategic steps by focusing on efforts to increase CC.

In dealing with criminal cases, the Investigation Unit is equipped with guidelines for the procedure of criminal investigations in accordance with the Peraturan Kepala Kepolisian Negara Republik Indonesia Nomor 6 Tahun 2019 which regulates everything regarding investigations. The regulation was established as the guideline for investigators of the Indonesian National Police to be able

to carry out their duties, functions, and authorities in a professional, transparent, and accountable manner. In law enforcement efforts, the effectiveness and efficiency of investigations are key factors in determining the successful resolution of crime cases.

The Investigation Unit is directly in charge of handling criminal reports in its area. However, the investigation process is often faced with various obstacles, such as investigator's competence, limited resources, sub-optimal management system, and the more complicated development of crime motives are some of the many factors that affect efforts to increase Crime clearance.

In line with the rapid development of technology, police force is faced with the demands of adopting technology in the implementation of tasks and management systems. Hence, the Indonesian National Police to fulfil the PRESISI police program, it responded quickly with the issuance of policies related to the application of Police 5.0 Era Technology (Faniyah & Maulana, 2023: 1). This policy is based on Perkap Nomor 1 Tahun 2018 regarding Police Service 110.

Besides software and technological systems which play a role in reducing crime rate, the role of criminal investigator is no less or even more important in the effort to increase crime clearance rate. Criminal investigators are the key component in solving criminal cases through a thorough investigative process. Therefore, a criminal investigator must have adequate experience and knowledge. As emphasized by General Commissioner (Ret.) Drs. Nana Sudjana, M.M., "Investigators must have three crucial competencies, namely knowledge, skills, and

attitude in the field of investigative duties they carry out”. Not just an expression, these words are supported by Government Regulation No.58 of 2010 Article 2A Paragraph (1) and Article 3 Paragraph (1) which explains that to become an Investigator must have competence and meet the qualifications or other requirements to become a professional criminal investigator.

To aid in solving criminal cases, a breakthrough was created in the form of a web-based application from the Police institution to assist investigators in handling investigations. Based on the administration of Government Regulation (PP) No. 58 of 2010, concerning Amendments to Government Regulation No. 27 of 1983 concerning the Implementation of the Criminal Procedure Code and Regulation of the Chief of the Indonesian National Police No. 6 of 2019 concerning Criminal Investigation, defining that the Electronic Application for Investigation Management, hereinafter referred to as the E-MP Application, is a website-based application used by Investigators or Assistant Investigators in the investigation management system, as a means of controlling/supervising and database of criminal cases. The implementation of the Bareskrim policy of launching the Electronic Application for Investigation Management (E-MP) is for organizational purposes in improving bureaucratic structure, resources, disposition, and communication.

The bureaucratic structure of this software is well structured, it is evident that the upper unit leaders know and can directly control the investigation activities. The bureaucratic structure cannot be separated from organizational communication that

performs functions for control, motivation, and information (Winarno, 2008). Resources. Resources in this software can take the shape of human resources consisting of manpower, funds, infrastructure, groups or organizations. While group resources are how everyone has the same goals and objectives in achieving organizational goals.

The application of technology in the police system can not only increase efficiency and effectiveness in managing information and data, but also enable faster and more accurate analysis, which is needed to facilitate the investigation process. Although the application of technology in the police force has been maximized in terms of its use on a national scale, such as E-MP, the data still shows a fluctuating pattern that tends to lead to negative results. With the percentage of personnel who know about the existence of E- MP at 78.7% and the use of computer-based systems at 72.3%.

Considering the statements mentioned, the main problem of the research is acknowledged being the need to improve the performance rate of criminal investigators to better increase crime clearance rate. This is possible to achieve by utilizing the technology and innovation from The Indonesian National Police, which is a web-based application called E-Manajemen Penyidikan (E-MP) aimed to assist criminal investigators in both workload and performance. Further elaborations of the main problem can be formed as such:

1. How can the use of E-MP increase the crime clearance rate?
2. How can E-MP be utilized as a control and supervision tool?

From the problems identified and

formulated, the aims of the research are:

To be able to identify and understand the correlative effect between the usage of E-MP and crime clearance rate. On how it can effectively support criminal investigators in handling criminal cases. As well as how the web-based application can be used as an instrument or a tool to control and supervise the work and performance of criminal investigators.

In hope the study could bear fruit of use as a constructive feedback and evaluation. Also, as a reference and literature to add benefits in regards of information and comprehension regarding the topic for future theory tests, analysis, and studies.

II. LITERATURE REVIEW

Past research with similar premises of study is compared to providing an empirical foundation for the research. Furthermore, as a reference to assist in determining methods, theoretical basis of the study, and said hypothesis to be tested. Appropriate to the context and base of the study, these are the previous research referred to:

Hermawan & Susanto (2022), *Optimization of E-Management Investigation as an Effort to Modernize Law Enforcement*. This study explores the various technical, policy, and organizational aspects related to the implementation of E-MP, it also identifies the challenges and opportunities that exist. The research approach used for the study is descriptive analytical methods, with policy analysis and interviews with law enforcement and tech experts. The study found that the optimization of E-MP

requires updates in the legal framework, improvements in technological infrastructure, and continuous training of personnel. The article also emphasizes the importance of collaboration among law enforcement agencies to ensure the successful implementation of E-MP. Barriers such as cultural resistance, budget constraints and digital divisions in some regions are challenges that need to be overcome. This article provides an in-depth look at how E-MP can be effectively implemented in Indonesia, to demonstrate the potential of this innovative technology in improving case resolution as well as reducing crime.

Santoso & Prasetyo (2021), *Implementation of Investigation Management Information System in Law Enforcement to Improve the Effectiveness of Case Resolution* from the *Journal of Technology and Communication*. This study focuses on the implementation of investigation management information systems (SIMP) in several regional police forces in Indonesia. The purpose of this study was to evaluate the extent to which SIMP has been used to improve the effectiveness of case resolution in the law enforcement field. This research used a case study method with data collection through in-depth interviews, observation, and analysis of official documents from various regional police forces that have implemented SIMP. The data collected was analyzed qualitatively to evaluate the effectiveness and efficiency of the system. The author found that SIMP adoption in various regions showed significant improvements in the speed and efficiency of investigations, which directly impacted the crime clearance rate. This research

provides a clear picture of how E-Investigation Management technology can be adopted and practically implemented in Indonesian law enforcement institutions. The empirical data collected shows that the implementation of such technology accelerates the investigation process and improves case resolution.

Gede Bayu Krisna (2024), *The Effect of Information Technology Proficiency of Unit I Public Crime Affairs on the Effectiveness in Disclosing Crimes of Aggravated Theft at Ngawi District Police Station* was taken from the Final Project of the Police Academy Alumni Battalion Satya Dharma. This study aims to determine how the proficiency of information technology affects the effectiveness in disclosing the crime of theft with aggravation (curat) at Ngawi Police Station. The focus of this research is to measure how much the variables in the proficiency of information technology contribute to the effectiveness in solving aggravated theft cases. The study used a quantitative approach with survey techniques. Data were collected through questionnaires distributed to all members of Unit I Pidum (General Crimes) Satreskrim of Ngawi Police. The data collected were analyzed using multiple linear regression techniques with the help of SPSS software. The result of this study shows that although the frequency of using information technology is not always directly proportional to effectiveness, factors such as ease of exchanging information and access to inter-unit cooperation play an important role in increasing the effectiveness of case disclosure. Proficiency of information technology simultaneously proved to have a positive impact,

suggesting that integrated and effective use of technology can support better law enforcement at Ngawi District Police Station.

To identify the research gap between this study and previous studies, it is essential to analyze the similarities, differences, and elements of novelty between the two studies. This step involves outlining the aspects that have been researched previously and how the current research offers new perspectives or approaches that have not been discussed, to make an additional contribution to the existing knowledge in the field under study.

To maintain legitimacy of the study, theoretical concepts are used to better understand and analyze the research problems. Theories, concepts, or models are all appropriate and relevant to the topic of the study. Therefore, providing a reliable framework for developing hypothesis, methodology, and data analysis.

Management Information Systems (MIS) theory focuses on how information technology is used in organizations to support decision-making, improve operational efficiency, and achieve strategic goals (Laudon & Laudon, 2020). MIS involves the utilization of software, hardware, networks, and databases to collect, store, and analyze information relevant to decision-making. In the context of law enforcement, the implementation of management information systems can help police organizations, such as Cirebon City Police, in optimizing the criminal investigation process.

This system allows the integration

of various data sources, including community reports, CCTV footage, GPS data, and digital forensic results, which can be analyzed in real-time to identify crime patterns and respond to incidents more efficiently (O'Brien & Marakas, 2019). According to Laudon and Laudon (2020), an effective MIS not only supports day-to-day operations but also serves as a strategic tool that provides a competitive advantage by facilitating innovation and adaptation to changes in the external environment. In addition, by using the analytical data generated by the MIS, police forces can design more effective crime prevention strategies based on trends and patterns identified from historical data (Robbins & Judge, 2019).

The Legal Certainty Theory by Gustav Radbruch (1961:36) posited that law is grounded on three fundamental principles: justice, utility, and legal certainty. legal certainty is a state where the law is articulated clearly, is predictable, and remains relatively stable. Such a legal system empowers individuals to comprehend their rights, obligations, and the legal ramifications of their actions. With legal certainty, societies can function more orderly, avoiding chaos, and enabling citizens to plan with greater confidence. The theory emphasized that while legal certainty is invaluable, the principle of justice must always take precedence. In essence, if a law is deemed unjust, it must be reformed, even if this temporarily compromises legal certainty. Consequently, the theory provides a comprehensive understanding of the pivotal role of legal certainty in the pursuit of just and equitable legal systems.

The implementation of E-MP in the criminal justice process is intrinsically linked to the principle of legal certainty. A structured, technology-driven E-MP system enhances investigative efficiency and effectiveness by providing clear procedures, reducing bureaucratic hurdles, and improving data accuracy. This aligns with the principle of legal certainty, which demands clear and predictable legal rules. Moreover, the high levels of transparency and accountability inherent in E-MP systems contribute to increased public trust in law enforcement. Consequently, it can be concluded that the implementation of E-MP is grounded in the principle of legal certainty and has the potential to significantly improve case clearance rates.

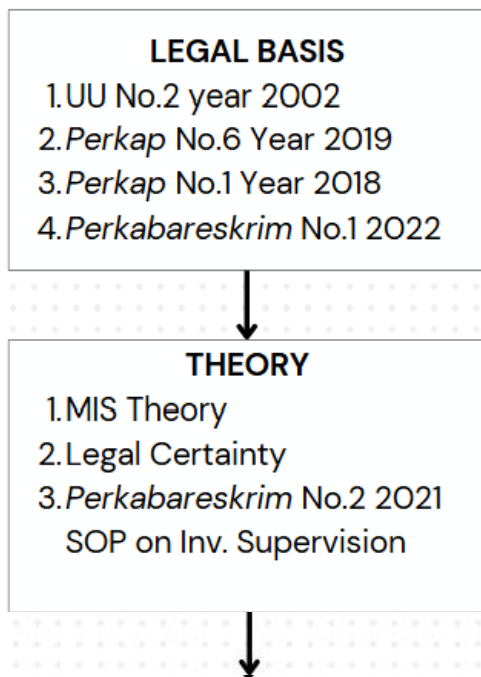
The National Police Regulation (Perkap) Number 1 of 2022 on Standard Operating Procedures for Investigative Supervision provides a robust foundation for research into the implementation of Electronic Investigation Management (E-MP). This regulation offers a comprehensive framework outlining how supervision in the investigative process should be conducted.

As a conceptual framework, the Perkap can be used to identify crucial variables for research, such as supervisory effectiveness, investigation quality, and adherence to procedures. Moreover, the Perkap can serve as a foundation for formulating research hypotheses. For instance, researchers can posit the hypothesis that implementing E-MP can enhance supervisory effectiveness in accordance with the provisions outlined in the Perkap.

By analyzing the Perkap, researchers can identify gaps or discrepancies between theory and practice. This can serve as a basis for recommending improvements to the existing supervisory system. Furthermore, by comparing research findings with the provisions of the Perkap, researchers can gauge the extent to which E-MP implementation has successfully achieved its intended objectives.

Image 1

Conseptual Framework



Implementation and usage of E-MP proficiently with correlation of the criminal investigator's performance



The increase in crime clearance rate in line with improvement of criminal investigators performance

Source: Author, 2024

III. RESEARCH METHOD

This study employed a qualitative research approach using descriptive design. This approach was selected as enables researchers to gain an in-depth and contextual understanding of phenomena, aligning with the guidelines proposed by Bogdan and Biklen (2007) who assert that qualitative methods are effective in uncovering the meaning behind complex phenomena.

Furthermore, to explore the experiences, perspectives, and perceptions of police officials directly involved in the implementation of E-MP. Data were collected through in-depth interviews with key informants, direct observation, and analysis of relevant official documents. This approach enabled a deep understanding of the complexities of implementing E-MP and how this technology influences investigative processes and crime clearance rates (Patton, 2002). The descriptive study aimed to identify the factors facilitating and hindering

the successful implementation of E-MP. Data obtained from interviews and documents were systematically analyzed to reveal patterns, relationships, and key findings.

The study uses a descriptive research design with the aim of providing a systematic, factual, and accurate account of the implementation of E-MP and its impact on crime clearance rates. The descriptive research design was selected as it is commendable for exploring relatively under-researched phenomena and offering a comprehensive understanding of how E-MP technology is applied and its subsequent effects on law enforcement effectiveness.

The data used in this study comprised both primary and secondary sources. Primary data were collected through in-depth interviews with police officials at the Cirebon Kota Police Station, specifically those directly involved in the investigative process utilizing the E-Investigation Management System.

The interview technique was chosen as, according to Patton (2002), interviews allow researchers to gain deeper insights into the experiences, perceptions, and attitudes of research subjects. Meanwhile, secondary data were obtained from official documents, annual reports, and other relevant literature pertaining to the research topic. Data analysis was conducted systematically through the stages of data collection, coding, and interpretation, as outlined by Miles and Huberman (1994).

The study is conducted in the West Java Region as it comprises from multiple districts around the area. The study accumulates data from multiple accounts and

sources from these different districts. In accumulating data, the study collects data through:

1. Primary Source:

Primary data is data obtained directly from original sources, namely parties who have direct knowledge of the topic being studied. The selection of informants as primary data sources was carried out using purposive sampling techniques, where informants must meet several criteria.

2. Secondary Source:

Secondary data in this research includes various information that has been previously collected by other parties and used to support and enrich the analysis of primary data. Secondary data sources are very important because they provide historical, theoretical and empirical context relevant to understanding the phenomenon under study. The data mentioned includes study documents and annual reports, guidelines or manuals, legal documents, and government laws.

To acquire accurate and comprehensive data regarding the implementation of E-MP in increasing crime clearance rates, this study employed a multi-method approach. Data was collected through in-depth interviews, participant observation, and document analysis. This multifaceted approach was designed to gather rich data from various sources, including primary data obtained directly from research subjects and secondary data derived from existing sources. By combining these data collection techniques, this study aims to provide a comprehensive and detailed account of the impacts and challenges of implementing E-MP

effectively. By combining various data collection methods, the study hopes to be able to provide a thorough and comprehensive overview on the effect of implementing E-MP.

For data analysis, the study utilizes thematic analysis. Thematic analysis is a method used to identify, analyze, and interpret patterns (themes) that emerge from data (Braun & Clarke, 2006). This approach was deemed suitable for this study as it allowed for an in-depth exploration of informants' experiences and perceptions regarding the implementation of E-Investigation, linking them to a broader context. According to Miles and Huberman (1994), qualitative data analysis consists of three primary stages:

1. Data reduction

The process of simplifying data that has been collected. In this study, data reduction was done through interview transcription, coding, and grouping of key themes. The coding process helped identify important information relevant to the research objectives, such as “system usage”, “technical challenges”, and “investigation effectiveness”. The coded data was then grouped into broader categories to focus the analysis on key issues (Miles & Huberman, 1994).

2. Data Presentation

Data were presented using matrices, diagrams, and descriptive narratives. Matrices were employed to summarize the emerging themes from the data, while diagrams visualized the relationships between themes, such as the investigative process before and after the implementation of E- Investigation. Descriptive narratives,

accompanied by direct quotes from interviews and observational notes, were utilized to provide rich context and substantiate the interpretation of findings (Creswell, 2014).

3. Conclusion and Verification Conclusions were drawn by identifying patterns and relationships that addressed the research questions, and by linking the findings to the existing theoretical framework. These conclusions were verified through data triangulation, member checking with informants, and peer review to ensure consistency and validity (Yin, 2009).

To ensure the validity of data collected, data triangulation was utilized to verify and validate data by comparing data obtained from multiple sources or methods. In this study, data triangulation was achieved by collecting data from various sources, including in-depth interviews, participant observation, and document analysis. This data triangulation aimed to ensure the consistency and credibility of the information obtained (Patton, 2002).

In addition to data triangulation, member checking was employed. Where preliminary findings are returned to informants for confirmation and verification. This technique was used to ensure that the researcher's interpretation of the data aligns with the informants' perspectives and to minimize bias.

IV. RESULTS AND DISCUSSION

The use of E-MP as a monitoring tool used in conducting investigations, including as a means of supervising investigations. As it is regulated in Annex V of *Perkabareskrim* Number 1 of 2022 regarding Operational

Procedure Standards on Crime Investigation Supervision, point (D), which includes:

a. **Purpose:**

The web-based application is a supervision tool that allows certified criminal investigators to digitally and remotely inspect case files. Through the E-MP, officers can directly track and submit their recommendations regarding the case files that are being handled. This system ensures that the investigation process runs according to procedure and can be juridically accounted for.

b. **Basis:**

The E-MP is used as a monitoring tool based on Annex IV of *Perkabareshkrim* Number 1 of 2022. As it is mentioned, one of the purposes in using E-MP is to optimize the effectiveness of supervision in the investigation process.

c. **Supervision Officer:**

Each certified crime investigator at the regency police station is provided with a personal account to log in on E-MP for the purpose of uploading case files, recommendations on case development, and many other things related to the process of criminal cases investigation procedure. The Chief or PIC (Person in Charge) as the officer in charge has a particular account monitoring the progress of ongoing investigations. The use of the E-MP assists the Chief in carrying out supervision and control actions of the investigation process, replacing the previous manual and time-consuming method of checking case files in each unit directly.

d. **Supervision Objects:**

The supervision objects in the

implementation of the E-MP system encompass all personnel within the Criminal Investigation Unit involved in investigative and inquiry processes, as well as all activities conducted by the unit, including the reception of police reports or complaints. The system monitors the entire investigative and inquiry process from initiation to the final resolution of criminal cases. Additionally, the application can capture information related to the completeness of administrative documents associated with investigative and inquiry activities. All of these activities can be monitored using the E-MP application. As stated in an interview with a unit investigator at the Cirebon City Police Station "Various aspects can be monitored using this E-MP application. All an officer's activities, from the beginning to the end of a case, can be tracked through this application. The application helps to monitor the progress of case handling, both ongoing and completed cases. Thus, supervisors can directly observe the performance of individual investigators."

e. **Supervision Team:**

The supervision team, responsible for conducting supervision, has several duties such as receiving presentations from investigators regarding the handling of cases under investigation, conducting in-depth examinations of the investigative and inquiry processes carried out by investigators, compiling findings related to problems and obstacles faced by investigators during the investigative and inquiry process, and providing

technical guidance and direction regarding investigative and inquiry issues faced by investigators, which are documented in written directives.

f. **Reporting:**

Through the reporting function within the E-MP application, supervisors can monitor the progress of cases under their supervision. They can track the stage of the investigation process that has been reached by the investigator and identify any obstacles faced by the investigator in handling the case. Subsequently, the supervisor can provide solutions to the problems faced by the investigator so that the case can be handled effectively.

In using the E-MP application, all data inputted into the system is directly transmitted to and monitored by the National Police Headquarters' central command. If any errors or deficiencies are found, the central command can directly correct them, and the investigator can immediately make the necessary adjustments.

In accordance with Laudon's management information systems theory, an effective information system requires core components to enhance the quality of work and organizational performance. The E-MP system, as a case in point, relies on the following components:

1. **Hardware:** Investigators can utilize their personal laptops or mobile devices to access and use the E-MP application. This flexibility allows for data input and case file updates to be conducted anywhere and at any time, streamlining the investigative process.
2. **Software:** The E-MP application is

a web-based platform accessible to all investigators, facilitating the creation and online editing of case files. This significantly expedites the investigative process.

3. **Networking:** The E-MP application is connected to a centralized national network. This means investigators can not only access case files inputted by their respective police stations but also view files from other stations, enabling a comprehensive overview of case statuses. The National Police Headquarters' central command directly monitors this interconnected system.
4. **People:** The E-MP application is designed to be used by all investigators involved in the investigative process. Investigators are responsible for uploading case files, while supervisors oversee the investigative process. To ensure effective utilization, comprehensive training is provided to all users. The presence of supervisors allows for timely corrections and improvements to the system

The existence of E-MP provides several benefits in accelerating the investigation and inquiry processes. With the implementation of document uploads and real-time examinations, E-MP facilitates a faster investigative procedure. Moreover, E-MP ensures legal certainty by enabling real-time corrections by supervisors of investigators, thereby simplifying and speeding up the investigation and inquiry processes.

E-MP can be said to guarantee legal certainty because, according to the legal

certainty theory proposed by Gustav, it encompasses the following key points:

- Law is a positive entity, meaning that positive law refers to statutory regulations.
- Law is based on facts, meaning that law is created based on reality.
- The facts contained in or stipulated in legislation must be formulated clearly to avoid misinterpretation and ensure easy enforcement.
- Positive law should not be subject to arbitrary changes.

Based on these key points of legal certainty theory, the use of E-MP enhances legal certainty because all documents entered by investigators follow statutory regulations. Thus, when inputting data, investigators only need to adjust the document format as outlined in the EMP application before it is uploaded into the system.

V. CONCLUSION AND SUGGESTIONS

It is clear pertaining to the results of the study conducted through multi-faceted processes based on data from numerous sources, in which the usage of the web-based application E-MP does contribute in the effort to increase crime clearance.

By significantly improving criminal investigators' efficiency through E-MP, not only will legal certainty be carried out, but they can also optimize routine tasks to focus on more crucial cases, faster data access leads to quicker case resolves and evidence analysis, minimizing human errors, identifying crime patterns to help predict crime occurrence, and facilitates better decision making. All of which accumulates for a notable improvement in criminal investigators' performance leading to higher criminal clearance rates.

The E-MP system facilitates supervisory oversight of investigators, enabling the monitoring and evaluation of their performance. This feature is integral to the system and is in line with the standard operating procedures for investigative supervision.

The study suggests investigators must possess the requisite skills and competencies to effectively utilize the E-MP application's key features. This ensures that the system's full potential is realized, and that casework can be conducted efficiently.

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