

Use of the Electronic Citizen Record by Nurses: Contributions and Challenges in Primary Health Care

Uso do Prontuário Eletrônico do Cidadão pelos Enfermeiros: Contribuições e Desafios na Atenção Primária à Saúde

Uso del Historial Clínico Electrónico del Ciudadano por Parte de ços Enfermeros: Contribuciones y Retos en la Atención Primaria de Salud

RESUMO

Objetivo: Compreender a percepção dos enfermeiros sobre o uso do Prontuário Eletrônico do Cidadão na Atenção Primária à Saúde. **Metodologia:** Pesquisa exploratória, descritiva, qualitativa, realizada entre junho e setembro de 2024 com 40 enfermeiros do centro-oeste mineiro. Os dados foram coletados por questionário sociodemográfico e roteiro de perguntas, analisados com base na análise de conteúdo e na Teoria das Representações Sociais. **Resultados:** Foram elencadas três categorias: 1. Contribuições do Prontuário Eletrônico do Cidadão para a organização do fluxo e continuidade do cuidado; 2. Papel do Prontuário Eletrônico do Cidadão no atendimento compartilhado e segurança do paciente; 3. Desafios e limitações na documentação e integração entre sistemas eletrônicos. **Considerações finais:** O Prontuário Eletrônico do Cidadão é reconhecido como ferramenta estratégica, contribuindo para o atendimento compartilhado e organização do fluxo. Contudo, apresenta limitações nos relatórios, na interoperabilidade e na documentação do Processo de Enfermagem, indicando necessidade de aprimoramentos. **DESCRIPTORIOS:** Atenção primária à saúde; Registros Eletrônicos de Saúde; Enfermagem; Saúde da Família.

ABSTRACT

Objective: To understand nurses' perceptions of the use of the Electronic Citizen Record in Primary Health Care. **Methodology:** Exploratory, descriptive, qualitative research conducted between June and September 2024 with 40 nurses from the midwest region of Minas Gerais. Data were collected using a sociodemographic questionnaire and a list of questions, analyzed based on content analysis and Social Representation Theory. **Results:** Three categories were listed: 1. Contributions of the Electronic Citizen Record to the organization of the flow and continuity of care; 2. Role of the Electronic Citizen Record in shared care and patient safety; 3. Challenges and limitations in documentation and integration between electronic systems. **Final considerations:** The Electronic Citizen Record is recognized as a strategic tool, contributing to shared care and flow organization. However, it has limitations in reporting, interoperability, and documentation of the Nursing Process, indicating a need for improvement. **DESCRIPTORS:** Primary health care; Electronic Health Records; Nursing; Family Health.

RESUMEN

Objetivo: Comprender la percepción de los enfermeros sobre el uso del Expediente Electrónico del Ciudadano en la Atención Primaria de Salud. **Metodología:** Investigación exploratoria, descriptiva y cualitativa, realizada entre junio y septiembre de 2024 con 40 enfermeros del centro-oeste de Minas Gerais. Los datos se recopilaron mediante un cuestionario sociodemográfico y un guion de preguntas, y se analizaron basándose en el análisis de contenido y la Teoría de las Representaciones Sociales. **Resultados:** Se enumeraron tres categorías: 1. Contribuciones del Expediente Electrónico del Ciudadano a la organización del flujo y la continuidad de la atención; 2. Papel del Expediente Electrónico del Ciudadano en la atención compartida y la seguridad del paciente; 3. Retos y limitaciones en la documentación y la integración entre sistemas electrónicos. **Consideraciones finales:** El Expediente Electrónico del Ciudadano se reconoce como una herramienta estratégica que contribuye a la atención compartida y a la organización del flujo. Sin embargo, presenta limitaciones en los informes, la interoperabilidad y la documentación del proceso de enfermería, lo que indica la necesidad de mejoras. **DESCRIPTORIOS:** Atención primaria de salud; Registros electrónicos de salud; Enfermería; Salud familiar.

Rafaela Cristina Moreira

Nurse, Specialist in Primary Care/Family Health at the Federal University of São João Del-Rei
ORCID: <https://orcid.org/0000-0001-6474-586X>

Daniela Aparecida de Faria

PhD Candidate in Health Sciences at the Federal University of São João Del-Rei
ORCID: <https://orcid.org/0000-0001-8938-9371>

Dayane Batista dos Santos

Undergraduate Nursing Student at the Federal University of São João Del-Rei
ORCID: <https://orcid.org/0000-0002-6035-4666>

Joana Stéphanie Cidade Santos

Nurse, Specialist in Primary Care/Family Health at the Federal University of São João Del-Rei
ORCID: <https://orcid.org/0000-0003-3729-2273>

Adriana Eva Cardoso

Social Sciences, State University of Minas Gerais
ORCID: <https://orcid.org/0009-0003-5640-1583>

Kellen Rosa Coelho

Faculty Member, Nursing Program, Federal University of São João Del-Rei
ORCID: <https://orcid.org/0000-0002-8629-8367>

Flávia de OliveiraFaculty Member, Nursing Program, Federal University of São João Del-Rei
ORCID: <https://orcid.org/0000-0002-9044-6588>

INTRODUCTION

The restructuring of information in Primary Health Care (PHC), combined with the modernization of the technological platform, led to the implementation of tools to improve the quality of care and enhance management monitoring in health units. The Primary Care Information System (SIAB), implemented in 1998, was gradually replaced by the Health Information System for Primary Care (SISAB), established by the Ministry of Health through Ordinance GM/MS No. 1,412/2013, becoming the current system in PHC.⁽¹⁾ SISAB modernizes the technological platform, allows for more individualized data collection integrated with the e-SUS Primary Care Strategy, and facilitates the work process in health units by restructuring health information.⁽²⁾

The e-SUS AB System has two software programs for data collection: the Citizen Electronic Medical Record System (PEC), which aims to support the computerization process of Basic Health Units and the flow of citizens served by health professionals; and the Simplified Data Collection System (CDS), which aims to support the data collection process through forms and typing systems.⁽²⁾

Between 2017 and 2022, the number of Brazilian municipalities participating in the Electronic Citizen Record (PEC) grew from 8,930 to 26,091, reflecting the computerization of Primary Health Care.⁽³⁾ According to Resolution No. 7/2016, the PEC ensures that PHC actions are recorded electronically, covering health, clinical, and administrative data.⁽⁴⁾ With new features and updates, the system unifies data-

Received: 10/28/2025

Approved: 11/17/2025

bases and streamlines work processes in health units.⁽⁵⁾

Notably, in the municipality of Divinópolis-MG, the bidding process for the implementation of e-SUS was presented at the beginning of 2022, and it was implemented in health units in the same year. As evidenced, the implementation process in the municipality occurred in both modalities, PEC and CDS, which vary according to the reality of each health unit, such as the number of existing computers and internet connectivity.

Recent studies point to significant challenges regarding the quality of records in health information systems, highlighting a high percentage of missing data on patients, clinical conditions, and morbidities relevant to the management, monitoring, and treatment of health conditions.⁽⁶⁻⁷⁾ Incomplete and inconsistent records hinder the epidemiological characterization of the population and the monitoring of patients according to the recommended therapy, directly affecting the planning of actions and decision-making in health.

Thus, the records made in the PEC are essential for communication between the nursing and multidisciplinary teams in the health service, which involve ethical and legal aspects, analyses, quality of care, and patient and professional safety.⁽⁸⁾ In this sense, with the advancement of computerization in the ESF and the use of the PEC by professionals, the present study aimed to understand nurses' perceptions of the use of the PEC in the context of primary health care.

METHODOLOGY

This is a qualitative exploratory descriptive study in which the Consolidated Criteria for Reporting Qualitative Research (COREQ) was used to guide the structuring of the method.⁽⁹⁾ The study was conducted in Family Health Strategy units located in the municipality of Divinópolis, Minas Gerais, Brazil, which had a total of 65 Family Health Strategy units at the time of the research.

Data collection took place from June to September 2024 and was carried out by a resident of the Graduate Program in Nursing in Primary Care and Family Health, linked to the Federal University of São João Del-Rei (UFSJ), after training with the research advisor.

The inclusion criteria for selecting participants were: nurses with at least six months of experience in their current position, who had completed the PEC training offered by the municipality, and who used the PEC in their professional practice. The exclusion criteria were: nurses who were on vacation or leave during the data collection period and who had not received PEC training. Initially, telephone contact was made with all nurses from the municipality's ESFs to survey the research participants and schedule data collection.

Twenty-five nurses who did not meet the inclusion criteria were excluded, two of whom had not completed the PEC training, three who were on medical leave, one who was absent from work, 15 who refused to participate, one ESF without a nurse present, and three with less than six months of experience at the ESF. Thus, all 40 nurses who met the inclusion criteria were interviewed, and the Free and Informed Consent Form (FICF) was read and signed, as recommended by ethical standards. The interviews were conducted individually in the nursing rooms of the respective units, ensuring privacy and confidentiality of informa-

tion.

The interviews were conducted using a sociodemographic questionnaire and a semi-structured interview, consisting of the following questions: 1. How do you perceive the use of the PEC in your professional practice?; 2. What are the contributions of the PEC to user care within the ESF?; 3. Is there anything else you would like to add about your experience with the PEC?

Each interview lasted approximately 20 minutes and was recorded on a smartphone. To ensure anonymity, participants were identified with the letter "E" followed by a number, according to the order of participation. The interviews were concluded when data saturation was reached during the organization and analysis of the statements.

Sociodemographic data were tabulated in Excel, a free version of Microsoft 365, and the interviews were fully transcribed by the researchers. The analysis and interpretation of the content, with the aim of deepening the understanding of the phenomenon studied, was carried out using Thematic Content Analysis⁽¹⁰⁾ and the theoretical framework of Social Representation Theory.⁽¹¹⁾

The research was approved by the UFSJ Human Research Ethics Committee under opinion 6.818.544 and Certificate of Presentation for Ethical Review (CAAE) number 76366823.3.0000.5545.

RESULTS

Forty nurses were interviewed, with a median age of 40 years (40-48), 32 (80%) of whom were female. Regarding marital status, 26 (65%) are married or live in a consensual union. Regarding educational level, 3 have only higher education, 26 (65%) have some specialization—with emphasis on Public Health and Preceptorship—and half of these do not have specialization in Family Health Strategy; 8 (20%) have

a master's degree and 3 (7.5%) have a doctorate.

Regarding the number of children, 21 (52.5%) reported having two children. Regarding the length of training, 34 (85%) graduated more than 10 years ago, with 20 (50%) having between 12 and 24 years of experience in Primary Health Care (PHC). Regarding professional experience, 26 (65%) have no previous experience in primary care, while 14 (35%) do. Regarding the use of systems other than the PEC, 35 (87.5%) reported having used or still using systems such as VIVVER (Out-sourced System) and the Health Information System (SIS).

The interpretive analysis of the interviews enabled the construction of three categories, namely: 1. Contributions of the PEC to the organization of the flow and continuity of care; 2. The role of the PEC in shared care and patient safety; 3. Challenges and limitations of the PEC in documentation and integration between electronic systems

1. Contributions of the EHR to the organization of care flow and continuity

The nurses highlighted the contribution of the EHR to the work of the ESF health team. Among the aspects pointed out, the continuity of care provided by different team members, the recording of patient history, the organization of the unit's functioning and flow, as well as the availability of basic patient data on the first cover sheet were emphasized. These contributions are evidenced in the following statements:

"Any professional knows what happened to the patient previously." (E1)

"We open the medical record and can see everything about the patient. If they have any drug allergies or illnesses, everything is on the cover sheet, which I think is very important" (E9).

"It made our care easier, more organized, and better planned." (E3)

"The PEC helps a lot, it also helped with the flow of the unit, which is important to mention, because it helped us organize the flow... Everyone who comes to the unit for any type of care, we must register the patient in the system at the reception desk" (E10).

Another point raised was that the PEC represented a major contribution due to the replacement of physical medical records with computerized ones, which directly impacts the reduction of lost documents. In addition, nurses highlighted the practicality provided in referring patients and the permanence of all patient information, ensuring that care is not impaired and minimizing the loss of medical records.

"Paper is gone, it's easier to find information, and prescriptions are more legible." (E8)

"So, for example, if someone loses their vaccination card, everything is here in the system. Everything they do, their life is in the system. I think the PEC is good, because physical medical records get lost over time, right? The writing fades, it turns yellow" (E16).

"Let's suppose that before, I would refer someone to a pediatrician, and then I had to write everything down by hand on paper. Everything was on paper, right? Medical records, too, in the past, were all on paper, filed away, there was so much stuff. And nowadays, no... The issue of information, right, it's much more practical to have it computerized" (E40).

This category shows an improve-

ment with the use of the PEC when compared to physical medical records and the SIS, highlighting the presentation of complete, succinct, and relevant patient information on the first cover page, the speed of data retrieval, the significant reduction in paper use in healthcare facilities, and the optimization of professionals' time.

2. The role of the EHR in shared care and patient safety

All interviewees expressed favorable expectations regarding the implementation of the EHR in the ESF, recognizing it as a computerized clinical record system capable of optimizing work dynamics, promoting shared care, and patient safety when it comes to understanding prescriptions.

"So, the issue of shared care did not exist. The issue that also improved for the user, I felt, was the issue of prescriptions. Because in the past it was done by hand, so the user did not understand the handwriting, and sometimes we did not understand it either (lol)" (E9).

"Less risk of error, organized and legible information. It provides more security for care." (E29)

"Everyone uses the same system, recording progress in a uniform manner, which helps the team." (E28)

"So, sometimes, the patient has changed locations, right? Let's put it this way, he left my ESF and went to another ESF, he doesn't need to take anything physical with him, because everything is in the system. So, everyone can see it. So, the whole network talks, right?" (E13).

According to the reports presented, it can be observed that the PEC is an important tool for shared care, as well as for patient referral and counter-referral

processes. In addition, it is clear that the system contributes effectively to guiding the collection of information, medical history, and physical examination, especially during prenatal and childcare consultations, as demonstrated in the following statements:

"Referrals and counter-referrals between professionals at the unit have improved a lot." (E 22)

"The system reminds you which fields to fill in according to the life cycle, such as childcare and prenatal care." (E30)

"The PEC has something I really like, which is that it doesn't let us forget, right? For some, it may be limiting, but for me, I find it interesting in terms of what I need to address in each life cycle, so to speak. I find the PEC very interesting in this regard, you know? It helps us, and depending on the life cycle and age group, it guides us in what we cannot forget." (E39).

According to the statements quoted by the nurses, this category showed that the information described and available in the PEC is essential for healthcare, always prioritizing communication and guiding each patient's consultation according to their life cycle.

3. Challenges and limitations of the PEC in documentation and integration between electronic systems

During the interviews, it was possible to identify some challenges related to the use of the PEC, especially regarding the absence of nursing diagnosis notes and access limitations for certain professional categories in the context of the ESF. The nurses pointed out that, as it is an instrument intended for professional registration, the PEC should include specific fields for entering nursing diagnoses, as well as spaces for notes specific to each professional class

working in the ESF.

"I imagine it would be good if it were more geared toward each professional class. And maybe it's utopian, but if it were more tailored to nursing care, to medical care, to nutritionists, to psychologists, in the case of nursing, with possible nursing diagnoses and interventions, it would be great, it would be incredible" (E29).

"It is not possible to record nursing diagnoses. There are some things that we cannot fit into the CIAP, right?" (E6)

The International Classification of Primary Care (ICPC) was mentioned by participants as being present in the PEC. However, although it favors the identification of predefined medical diagnoses, such as those in the International Classification of Diseases (ICD), the system does not specifically address nursing diagnoses.

"I point out the internet failure and some CIAP CIDs, which sometimes I need every code, every word to have a code here in CIAP, that we have to know these codes. Sometimes I want a disease that is not yet here in CIAP, I need to type in some disease that the patient has" (E16).

"There are some things that we can't fit into CIAP, right? I think it would be good to have that too" (E6).

Another significant challenge mentioned was the incompatibility of the data obtained through the reports. Some nurses reported that the information does not match reality, as shown in the reports below:

"As a weakness, the issue of reports, which are sometimes still very confusing" (E2).

"I still find the issue of reports a little difficult. The PEC reports in relation to other reports we had access to, I think they are the worst... the reports are what I still find most difficult" (E21).

"Now, as a weakness, I see a lot of discrepancies in the information. We often notice that when they send us the spreadsheets and reports, we see that they don't add up" (E28).

"Some reports are difficult to generate or contain outdated data." (E34)

The lack of integration between electronic systems and communication failures with secondary and tertiary care were highlighted as weaknesses in the study. With regard to communication, it was observed that this deficiency occurs both between health services in the municipality of Divinópolis-MG and in coordination with other municipalities and with the Ministry of Health's Information Systems. Nurses emphasized the need to improve these information flows, since weaknesses in integration and adequate communication in the healthcare network can compromise longitudinal monitoring of users.

"I think that secondary care should also use the PEC, perhaps the CAPS, the CAPS AD, CAPS infantil, CAPS 3, and the UPA. There is no communication via PEC, because it is specific to primary care. I think it should be expanded to all levels of care. Another issue is that it does not communicate, for example, with SISCAM, which is the Cervical and Breast Cancer Information System" (E10).

"It couldn't just cover primary care. All levels of care evolved within it; there didn't need to be other systems, because then

there would be a single, standardized system. I think this is a weakness because it ends up fragmenting things; you need another system to cover secondary care, tertiary care..." (E8).

This category enabled the identification of challenges related to the PEC pointed out by the nurses interviewed, as well as the need for integration between levels of healthcare and the Ministry of Health's Information Systems.

DISCUSSION

Social Representation Theory (SRT) seeks to understand how individuals and groups develop and share knowledge to make sense of reality, constructing meanings about certain social objects.⁽¹¹⁾ In this sense, this theory offers an adequate framework for analyzing professionals' perceptions of the Electronic Citizen Record (ECR), since it allows us to identify how nurses interpret, attribute meaning, and share knowledge about this tool in the context of everyday practice.

Nurses reported that the PEC facilitates the recording of user history and makes data available on the first page. They construct a social representation of the system as a tool that centralizes and organizes patient information, allowing quick access to essential data and reinforcing patient-centered care.

According to Oliveira⁽¹²⁾, when properly completed, the EHR allows for detailed recording that improves the work of professionals and the quality of care. The system promotes safer and more efficient care, making it possible to retrieve the complete history and reinforcing continuity of care. Studies indicate that the EPR provides basic data on the first page, allowing detailed knowledge of the user and reducing information loss compared to the paper model.

The adoption of the computerized

system in this study reduced the loss of information due to misplaced medical records. Professionals pointed out that the paper model has problems with standardization and illegibility, compromising the understanding of guidelines and prescriptions. The literature indicates that the transition from paper to electronic records improves communication and information exchange and reduces errors among healthcare teams.

The lack of standardization in data collection hinders continuity of care, especially for users who move through different levels of health care. The transition from paper to electronic records can therefore facilitate communication between professionals, expand the exchange of information and reduce errors among healthcare teams.

Another relevant aspect is that, unlike paper medical records, which are characterized by free and non-standardized notes, the PEC adopts a structured record model that requires more complete and consistent information.⁽⁸⁾ The implementation of the EMR represents structural changes in technologies and work processes already consolidated in Brazil, leading to the computerization and strengthening of digital health in the country.⁽³⁾

In this study, nurses present a positive and functional representation of the PEC, associated with modernization, organization, and continuity of care. The EMR is perceived as a symbol of technological advancement and security in information management, since the availability of a computerized system provides healthcare professionals with greater practicality and agility in the performance of their activities, in addition to favoring referral and counter-referral processes and ensuring continuity of care.

The PEC is an important tool for applying Information and Communication Technologies (ICT) in Primary Health Care, contributing to the integration and coordination of care.⁽³⁾ ICT

supports clinical practice in Primary Health Care by improving work processes, assisting in meeting demands, and facilitating the flow of users to specialized care.

In relation to the flow of Primary Care services, the PEC is capable of directing the organization of the service and the patient to the care they seek. In this sense, Valdes and Souza⁽¹⁶⁾ state in their study that electronic medical records promote agility, organization of professionals' schedules, and user queues, reflecting the improvement of primary care.

Another relevant aspect of the EMR present in the study was in relation to shared care, which was non-existent. From the TRS perspective, these collective constructions reflect how nurses internalize and externalize the meanings of technology in their daily professional lives, in which the EMR is not only a practical tool but also a symbolic mediator of communication and integrated care by the multidisciplinary team that sustains team cohesion according to the needs of the service user.

The use of a medical record capable of integrating care allows the sharing of clinical information that can promote continuity of care⁽¹⁷⁾ and tends to reduce fragmentation in the care delivery system, improving quality and efficiency by reducing gaps in care.⁽¹⁸⁾

Although it enables integrated care, participants emphasized that, as a professional record-keeping tool, the PEC should have specific fields for recording the nursing process and spaces for notes from each professional category of the ESF. According to Resolution 736, the Nursing Process must be carried out deliberately and systematically in every socio-environmental context in which nursing care occurs. The law ensures that the documentation of the Nursing Process must be carried out by team members formally in the patient's medical record, with the Nurse being responsible for recording all its stages.

However, the PEC has its data structure built based on the Problem-Oriented Medical Record, which has three fundamental areas for recording clinical information: the citizen database, the list of problems, and the clinical progress notes structured in the Subjective, Objective, Assessment, and Plan (SOAP) format. Following this logic, all developments of the system were designed and implemented to improve health records and facilitate the analysis of the patient's condition and clinical history. Over the 10 years of the PEC, several versions of the system have been released, with technical improvements, new features, and new modules.^{We} believe that an update that includes the nursing process is relevant.

Thus, it is clear that the PEC is simultaneously seen as a tool for advancement and as an obstacle to professional autonomy. This ambivalence is characteristic of social representations in contexts of technological change, in which the new has not yet been fully assimilated into the symbolic field of the group.

Another weakness identified in this study refers to the integration between electronic systems and communication failures with secondary and tertiary care, showing that participants attribute collective meanings to the limitations of the system, recognizing that the technology does not yet fully meet the demands of integrated and continuous care.

The need for integration with secondary and tertiary care has already been pointed out in other studies. Of particular note is the need to expand the PEC to other services in the healthcare network in order to contribute to the longitudinal nature and continuity of care provided to citizens through healthcare professionals' access to patients' clinical data in different healthcare services.⁽³⁾

The incorporation of technological

resources at different levels of healthcare, combined with training professionals in their proper use, has the potential to improve service quality and promote the rational and efficient use of available resources and supplies. Such technologies enable secure information sharing, contributing to the unification of patient records and automated data collection. However, integrating data from different platforms is not a simple task and presents some challenges, such as communication standards and the data models that are produced.

Regarding the reports generated by the PEC, nurses associate the reports with compatibility issues and difficulty in interpretation, constructing social representations that question the reliability and usefulness of the system. They perceive the reports as problematic instruments, whose data often do not reflect reality, are confusing, or are outdated.

With the implementation of the Previne Brasil program, municipalities began to hire private companies to extract data and produce performance indicators. It is important to note that the PEC e-SUS APS system was not originally designed to integrate with external platforms, either for information extraction or for data sharing between services. The reports issued by the PEC have potential for future improvements, especially with regard to the construction of indicators that support managers in optimizing the use of public resources in the field of Primary Health Care (PHC).⁽³⁾

Thus, although PEC is recognized as a strategic tool in PHC, its current limitations in relation to reports and integration with external platforms highlight the need for improvements. Investing in interoperability, data standardization, and professional training is essential for the system to fully perform its role in supporting management, decision-making, and improving the quality of care.

FINAL CONSIDERATIONS

The social representations constructed by nurses indicate that the PEC is perceived as a strategic and innovative tool in Primary Health Care, capable of centralizing information, reducing data loss, and promoting continuity and safety of care. At the same time, these representations reveal limitations related to the reliability of reports, integration with external platforms, and the need for adaptation for complete recording of the Nursing Process, showing that the technology has not yet been

fully assimilated into everyday professional practice.

Among the limitations of the study, it is noteworthy that the sample was restricted to nurses from the interior of Minas Gerais, which may not reflect the perception of professionals from other municipalities or health contexts. In addition, the investigation was based mainly on subjective reports, which may influence the interpretation of the data and limit the generalization of the findings. Future research could include other professionals from the multidisciplinary team, as well as quantitative

analysis of the use of the PEC and its impacts on clinical practice.

Finally, the findings of this study suggest that future updates to the PEC should consider expanding functionalities focused on the Nursing Process, improving reports, and integrating with other levels of health care. Such improvements could strengthen patient safety, optimize the use of public resources, and consolidate the PEC as an instrument capable of sustaining the coordination, continuity, and quality of care in Primary Care.

References

1. Brasil. Ministério da Saúde. Portaria GM/MS nº 1.412, de 10 de julho de 2013. Institui o Sistema de Informação em Saúde para a Atenção Básica (SISAB). Diário Oficial da União. Brasília (DF); 2013 jul 10. Disponível a partir de: https://bvsms.saude.gov.br/bvs/saudelegis/gm/2013/prt1412_10_07_2013.html
2. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. e-SUS Atenção Básica: Manual do Sistema com Prontuário Eletrônico do Cidadão PEC – Versão 5.3 [recurso eletrônico]. Brasília (DF): Ministério da Saúde; 2025. Disponível a partir de: <https://sisaps.saude.gov.br/sistemas/esusaps/docs/manual/PEC/>
3. Celuppi IC, Mohr ETB, Felisberto M, Rodrigues TS, Hammes JF, Cunha CL, Wazlawick RS, Dalmarco EM. Dez anos do Registro Eletrônico de Saúde do Cidadão e-SUS Primary Healthcare: em busca de um Sistema Eletrônico de Saúde Unificado. *Rev Saude Publica*. 2024;58:23. doi: 10.11606/s1518-8787.2024058005770.
4. Brasil. Comissão Intergestores Tripartite. Resolução nº 7, de 24 de novembro de 2016. Define o prontuário eletrônico como modelo de informação para registro das ações de saúde na atenção básica e dá outras providências. Brasília (DF): Ministério da Saúde; 2016. Disponível a partir de: https://bvsms.saude.gov.br/bvs/saudelegis/cit/2016/res0007_24_11_2016.html
5. Brasil. Ministério da Saúde. SUS Digital amplia acesso às informações de saúde e inicia a implantação do prontuário unificado. Brasília (DF): Ministério da Saúde; 2024. Disponível a partir de: <https://www.gov.br/saude/pt-br/assuntos/noticias/2024/julho/sus-digital-estrategia-do-ministerio-da-saude-amplia-aceso-da-populacao-as-informacoes-de-saude-e-inicia-a-implantacao-de-prontuario-unificado>
6. Maria A, Silva RM, Pereira L, Souza J, Andrade M. Percepções e desafios no preenchimento dos prontuários entre profissionais da saúde na atenção primária. *Santé - Cadernos de Ciências da Saúde*. 2023;1(2):26-44. Disponível a partir de: <https://periodicos.unidesp.edu.br/sante/article/view/249/132>
7. Sales BSL, Oliveira M, Ribeiro P, Santos F, Costa L. Registro da assistência pela equipe de enfermagem no prontuário eletrônico do paciente: revisão integrativa. *Rev Enferm Atual*. 2025;99(1):025055. doi: 10.31011/reaid-2025-v-99-n-supl.1-art.2430
8. Avila GS, Souza AP, Menezes L, Rodrigues V. Prontuário eletrônico na gestão do cuidado em Equipes de Saúde da Família. *Cogitare Enferm*. 2022;27:e83745. doi: 10.5380/ce.v27i0.79641
9. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349-57. doi: 10.1093/intqhc/mzm042.
10. Bardin L. Análise de conteúdo. 4ª ed. Lisboa: Edições 70; 2021.
11. Moscovici S. Representações sociais: investigações em psicologia social. Rio de Janeiro: Vozes; 2003.
12. Oliveira AAC. Prontuário Eletrônico na Atenção Primária à Saúde: o olhar do enfermeiro [monografia]. Juazeiro do Norte (CE): Centro Universitário Doutor Leão Sampaio; 2022 [citado 2025 out 15]. Disponível a partir de: <https://sis.unileao.edu.br/uploads/3/ENFERMAGEM-2024/E1796.pdf>
13. Baniulyte G, Rogerson N, Bowden J. Evolution – removing paper and digitizing the hospital. *Health Technol (Berl)*. 2023;13(2):263-71. doi: 10.1007/s12553-023-00740-8.
14. Barbalho IM, Silva TM, Costa JF, Andrade A, Ribeiro LS. Electronic health records in Brazil: prospects and technological challenges. *Front Public Health*. 2022;10:963841. doi: 10.3389/fpubh.2022.963841.
15. Bender JD, Oliveira M, Santos L, Costa R, Lima V. O uso de Tecnologias de Informação e Comunicação em Saúde na Atenção Primária à Saúde no Brasil, de 2014 a 2018. *Cienc Saude Coletiva*. 2024;29(1). doi: 10.1590/1413-81232024291.19882022.
16. Valdes G, Souza AS. Uso de prontuário eletrônico e parâmetros de acesso e acolhimento segundo dados do terceiro ciclo do PMAQ-AB. *Cienc Saude Coletiva*. 2024;29:e04492023. doi: 10.1590/1413-81232024291.04492023
17. Tahsin F, Armas A, Kirakalaprathapan A, Kadu M, Sritharan J, Steele Gray C. Information and communications technologies enabling integrated primary care for patients with complex care needs: scoping review. *J Med Internet Res*. 2023;25:e44035. doi: 10.2196/44035.
18. Janett RS, Yeracaris PP. Electronic medical records in the American health system: challenges and lessons learned. *Cienc Saude Coletiva*. 2020;25(4):1293-304. doi: 10.1590/1413-81232020254.2892201.
19. Conselho Federal de Enfermagem (COFEN). Resolução nº 736, de 17 de janeiro de 2024. Dispõe sobre a implementação do Processo de Enfermagem em todo contexto socioambiental onde ocorre o cuidado de enfermagem. Brasília (DF): COFEN; 2024. Disponível a partir de: <https://www.cofen.gov.br/resolucao-cofen-no-736-de-17-de-janeiro-de-2024/>

