Quality of Clinical Record Registry: Self-criticism from Internists

Calidad del registro de la historia clínica: autocrítica desde los médicos internistas

Qualidade do registro da história clínica: autocrítica dos internistas

Lina María López Cano,[1] Carlos Enrique Yepes Delgado[2]

[1] Master's in Health Higher Education. Universidad de Antioquia, Colombia. limaria10@gmail.com. ORCID: https://orcid.org/0000-0002-4173-7047

[2] PhD in Epidemiology. Universidad de Antioquia, Hospital Pablo Tobón Uribe, Colombia. carlos.yepes@udea.edu.co. ORCID: https://orcid.org/0000-0001-5656-4989

Received: 23/08/2021. Approved: 21/11/2022. Published: 22/12/2022 Traduced: 30/11/2024

López-Cano LM, Yepes-Delgado CE. Quality of Clinical Record Registry: Self-criticism from Internists. Rev. Fac. Nac. Salud Pública. 2023;41(2):e350725. DOI: https://doi.org/10.17533/udea.rfnsp.e350725

Abstract

Objective. This work sought to describe the self-criticism that doctors specializing in internal medicine make about the quality of the information entered in the electronic clinical record, in Pablo Tobón Uribe Hospital. **Methods.** Qualitative study that applied techniques from grounded theory, with in-depth semi-structured interviews to 15 internists from a high-complexity hospital in Medellín, Colombia. The analysis started from a conceptualization with open coding and, then, the codes were grouped into descriptive categories. Properties and dimensions were identified related through axial coding with the grounded theory paradigm matrix, which permitted the emergence of a more-abstract category. **Results.** Those interviewed related the quality of filling out the clinical record with a regulatory context that imposes administrative and financial demands that put pressure from requirements external to the clinical on its filing. The study recognizes the influence of the digital culture and the immediacy, insufficiency in undergraduate and graduate medical training, and limitations of doctors in communication skills. The foregoing distances the physician from the patient, generating discouragement in the exercise of their profession, and facilitates making mistakes. **Conclusions.** Contradiction exists between the "is-ought" of the quality filing of the clinical record and that which takes place in the practice, given that its original intentionality of being a tool at the service of clinical care is distorted, by privileging having become an instrument that responds to other factors external to the medical practice and to administrative requirements of the health system.

---------*Keywords:* quality of healthcare, clinical record, internal medicine, electronic health records, in-hospital information systems, grounded theory.

Introduction

The first records of information about healthcare refer to Egyptian, Greek, and Roman civilizations, where writings were produced on slates and then on papyri, which gathered the need for humans to teach medicine and contained procedures of surgeries and treatments of diseases [1].

Subsequently, 42 well-characterized clinical records were known in "Epidemics I and III" of the *Corpus hippocraticum*, which became the foundation of the pillar document of medical knowledge. During the 19th and 20th centuries, the clinical record (CR) became a multidisciplinary document, elaborated with descriptive wealth, precision, and internal coherence by professionals who care for the patient [2].

In 1918, The American College of Surgeons of the United States welcomed Professor Abraham Flexner's recommendations on radical transformation in medical education, which included audit standards for the CR [3].

The CR permits recording information and events related with the attention of the medical practice, being a fundamental resource in the relationship between the doctor and patient [4]. Currently, the core of clinical informatics is the electronic clinical record (ECR), which articulates clinical-administrative applications with data management of institutions providing health services (IPS). With scientific, technical, and legal value, the CR permits making decisions and executing actions in favor of patients, with impact on public health [5], to point that the World Health Organization (WHO) considers the ECR as a fundamental input of health systems, and has as global objective to improve the quality of health data.

The quality of the record is a high-value input to monitor the patient's conditions, relevant for the health system and for research [6]. Deficiencies in health information and lack of qualified personnel to register data with quality threaten with collapsing health systems [7], to the extent that decisions regarding health expenses are affected, to be able to respond to specific health needs of countries and measure the progress and impact of health programs. Most of the global population lives in nations without reliable statistics about deaths, disaggregated by basic sociodemographic variables, which substantially affects recognizing the country's health priorities [8]. Having quality information is an essential condition for decision makers to develop and implement policies, plans, and projects that manage resources efficiently.

In Colombia, as of Legislation 100 of 1993 [9], the current health model established guidelines on managing the CR, through Resolution 1995 of 1999, by defining the mandatory nature of the registration of what was observed, the concepts, decisions, and results of healthcare by health professionals, technicians, and aides [10]. It is expected that CR committees in the IPSs adopt and comply with norms about the management of medical records, make recommendations about formats and annexes of the CR, as well as improve the records consigned therein. The IPS must provide resources for the administration and operation of the CR file.

Upon studying recent publications about the evaluation of the quality of the ECR, It is found that they tend to focus on the systematic and statistical review of records with checklists on the CR already filed [11]. Furthermore, it is recognized how little is known about the perception of physicians regarding the use of the ECR, in spite of studies carried out with data mining, which evidence satisfaction criteria associated with the speed and ease of rapid prescriptions, and the possibility of serving a greater number of patients [11]. In turn, dissatisfaction is mainly linked to the obstruction of the doctor-patient relationship [12]. Moreover, and what is quite important, although the ECR brings reliability and security to healthcare, it is known that it increases burnout in doctors due to the complex interaction among technology, policy, and care, which results in greater frustration of the medical practice with the ECR [13].

Although this quantitative approach is important, becomes insufficient, by ignoring a profound and preventive perspective that involves, in the evaluation, the doctor as primary source of the record. The Galen, in traditional quality evaluations, is limited to recognizing errors or omissions [14]. In that sense, it becomes relevant to promote reflection among doctors about the quality criteria they keep in mind in care records. Recent qualitative studies derive from this, which recognize that doctors' perspectives about the ECR are insufficiently studied and that part of the resistance against using the ECR is understood from the very behavior of the medical staff, reflection of their own values and beliefs, which corroborates even the interference that the ECR may imply in the relationship with their patients [15,16]. In that sense, two references support the need to know in depth the doctors' documentation practices [17,18].

The quality of the CR is clearly related with the way the physician assumes and values the act of the registry [14]. Therein the importance of the question aimed at doctors about the self-criticism they make of their own filing of the CR and, consequently, the selection of the qualitative approach to answer it.

Thereby, the aim of this study was to describe the self-criticism reflection doctors specializing in internal medicine make of the quality of the registry of information in the ECR at the Pablo Tobón Uribe Hospital of Medellín.

Methods

Qualitative study using coding and categorization of grounded theory (GT). The theoretical support was the symbolic interactionism to comprehend the behavior of individuals from the meanings of their experiences. The GT generates theoretical abstractions, emerging from data collected from personal experiences in concrete environments [19].

The study population included 15 internists from the Pablo Tobón Uribe Hospital, an IPS of high level of complexity in Colombia. Semi-structured interviews were carried out with the participating practitioners (Table 1), selected initially at convenience, starting with those who had experience, in their specialty, of 5 years or more.

Table 1. Characteristics of internists interviewed

			University studies			Years of healthcare experience		Experience
Interview	Sex	Age	Undergraduate university	Graduate university	Other studies	General practitioner	Internist	Other institutions
1	Male	34	Public	Public	Yes	1.5	5	Yes
2	Female	41	Public	Public	Yes	1.5	12	Yes
3	Male	61	Private	Public	Yes	2.5	31	Yes
4	Female	49	Private	Private	Yes	3	20	No
5	Male	42	Public	Public	No	6	13	Yes
6	Female	35	Private	Private	Yes	4	4	Yes
7	Male	56	Private	Private	No	9	23	No
8	Male	33	Public	Public	No	8	4.5	Yes
9	Male	37	International	International	Yes	2	4	Yes
10	Male	45	Private	Public	No	8	7	Yes
11	Male	55	Private	Private	Yes	2	23	No
12	Male	34	Public	Public	No	1.5	6	Yes
13	Female	30	Public	Public	No	1	2	Yes
14	Male	32	Public	Public	No	3	2	Yes
15	Female	33	Private	Private	No	4	3	Yes

After the first five interviews, with the emergence of the initial categories, theoretical sampling was conducted [19], to delve into and maximize the variations in the concepts arising. To this end, the interview script was modified and the other interviews were conducted with internists who had even less experience than initially intended.

Data collection was suspended after interview number 15, given that despite varying the questions, the answers began to reflect about what was previously found.

The inclusion criteria were: being a practicing internist, who had already been part of the hospital in the period 2018-2019 and agreed to participate. The area of knowledge selected was internal medicine because, in addition to being the specialty that has historically been recognized in the hospital as the one that best fills out the CR, it is the medical discipline that treats the most patients in the hospital, with 26% of hospital discharges. None of those invited refused to participate.

The interview was arranged, participant anonymity was protected and they signed an informed consent approved by the Hospital's Research Ethics Committee.

The interview script inquired about the following aspects:

Let's talk initially about the training received both in undergraduate and graduate studies, about the quality of the recording of clinical histories: how was the training offered by the university during the undergraduate and graduate studies in filling out the? Tell me about a class experience or about a professor you remember, which discussed and contributed to completing the CR. What would you recommend to medical schools about how to enhance lessons on filling out clinical histories?

Now, let's talk about lessons that from your professional experience you recognize in relation with the best filing of the CR: do you remember how you filled out the first clinical histories as general practitioner? Do you remember how you filled out your first clinical histories as a specialist? Tell us what would be the filing differences between the first clinical histories and those you file today. If you have done so, how have you given feedback to a colleague or been given feedback on how the CR should be completed? What importance do you give to the CR in your practice?

Let's talk now about the motivations and the valuation given to the quality of the registry in the CR: tell us, within your experience, what have you enjoyed most in the exercise of your profession? What are your principal motivations to properly fill out the clinical histories? What aspects do you consider a CR should contain for it to be of good quality? Tell us what you think the CR information is used for? What degree of importance do you consider quality should have in the CR for a health institution and for a health information system?

Let's talk about the self-criticism that doctors can develop around their own filing of the CR: for you, what does it mean to have to complete clinical histories? During the elaboration of the CR, how much do you wonder whether you are doing it properly? How do you think filling out the CR impacts you? How do you think filling out the CR impacts on the patient? How do you think filling out the CR impacts on the hospital information system and on the health system?

The audios were transcribed and their fidelity was verified.

The analysis had two moments: one descriptive and another analytical and interpretative. The descriptive carried out open coding and standardized the codes between the researchers. These were grouped into descriptive categories, identifying properties and dimensions of the GT.

The analytical moment was delved into through axial coding, by generating the paradigmatic matrix of GT, with its phenomenon, context, causes, relations of action and interaction and consequences.

Additionally, a constant comparative analysis was performed among codes, categories, theoretical references, theory emerging from the interpretation by the researchers [20]. Reflectivity permitted becoming aware of the constructs used as starting point by the researchers and the limitations of the analysis were recognized with transparency.

After the analyses, 1,635 codes were obtained, grouped into 37 descriptive categories (Table 2) and 76 properties. The final category, exposed in the results, was presented to the hospital's medical division and the clinical record committee, who evaluated that found.

Table 2. Initial descriptive categories

Art and aesthetics	Quality	Surgeons	Complexity
Communication	Communication with nurses	Trust	Credibility
Culture of information	Curriculum	Hidden curriculum	Valuable data
Shared decisions	Ethics	Experience	Fatigue
Formation	Writing habit in electronic clinical record	Electronic clinical record	Humanization of care
Interdisciplinarity	Kardex	Limitations	Medications
High-value medicine	Notes from nursing	Omission	Paradigms
Reflective thinking	Prestige	Feedback	Requirements from doctors
Joint rounds	Patient safety	Cognitive bias	Meaning of the clinical record
Information technologies			

The analysis used the Office® package by Microsoft® with its Word® and Excel® applications for open and axial coding, respectively, in 2019 version.

Ethical aspects

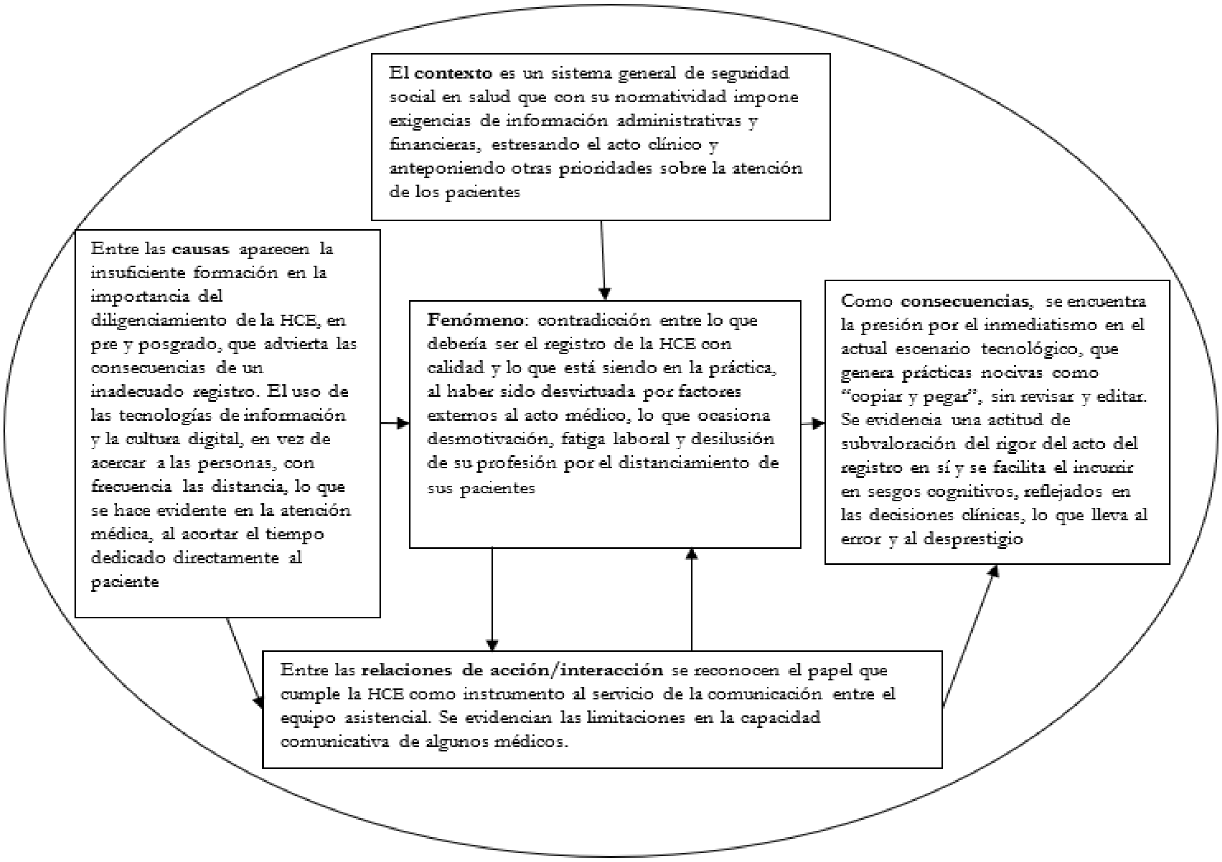
This research work was based on the 2016 Declaration of Helsinki by the World Medical Association [21], "Ethical principles for medical research involving human subjects", on Resolution 8430 of 1993 by the Ministry of Health [22], and on the "Ethical norms for research in humans", set forth in Resolution 2378 of 2008 [23]. Based on such, ethical principles, like beneficence, nonmaleficence, autonomy, and justice were preserved in the participants.

The research proposed had a minimum-risk classification level, given that it did not imply interventions of biological, physiological, sociological, or social variables, or which had to do with sensitive behavior aspects, according to Resolution 8430 of 1993 by the Colombian Ministry of Health. No vulnerable groups participated.

The protocol for this study was approved by the ethics committees at Universidad de Antioquia, Faculty of Medicine, through approval Minute 014 of 20 September 2018, and at Pablo Tobón Uribe Hospital, Minute 20/2018, of 19 October 2018, with protocol registry 2018-085.

Results

The internists interviewed revealed their appreciations about the quality the registry of the CR based on their experience, knowledge of the CR that many patients bring from other IPS, on their participation in telemedicine, and from their motivations and own self-criticism (Figure 1).



El **contexto** es un sistema general de seguridad social en salud que con su normatividad impone exigencias de información administrativas y financieras, estresando el acto clínico y anteponiendo otras prioridades sobre la atención de los pacientes

Entre las **causas** aparecen la insuficiente formación en la importancia del diligenciamiento de la HCE, en pre y posgrado, que advierta las consecuencias de un inadecuado registro. El uso de las tecnologías de información y la cultura digital, en vez de acercar a las personas, con frecuencia las distancia, lo que se hace evidente en la atención médica, al acortar el tiempo dedicado directamente al paciente

Fenómeno: contradicción entre lo que debería ser el registro de la HCE con calidad y lo que está siendo en la práctica, al haber sido desvirtuada por factores externos al acto médico, lo que ocasiona desmotivación, fatiga laboral y desilusión de su profesión por el distanciamiento de sus pacientes

Como **consecuencias**, se encuentra la presión por el inmediatismo en el actual escenario tecnológico, que genera prácticas nocivas como "copiar y pegar", sin revisar y editar. Se evidencia una actitud de subvaloración del rigor del acto del registro en sí y se facilita el incurrir en sesgos cognitivos, reflejados en las decisiones clínicas, lo que lleva al error y al desprestigio

Entre las **relaciones de acción/interacción** se reconocen el papel que cumple la HCE como instrumento al servicio de la comunicación entre el equipo asistencial. Se evidencian las limitaciones en la capacidad comunicativa de algunos médicos.

Figure 1. Paradigmatic matrix that reflects the principal study category: the contradiction between what should be the quality registry in the ECR and what it is in practice. ECR: Electronic clinical record.

They recognize the influence of the digital culture, which pressures toward immediacy, in addition to insufficient training during the undergraduate and graduate that some have with respect to filling out the CR, besides some limitations in communication skills. The aforementioned facilitates making mistakes and causes discouragement in the exercise of their profession.

They consider that the foundation of the CR should be preserved as information and communication tool in the medical practice, which provides clarity and guides quality care to the health of individuals.

In their testimonies, they point out how, from the first contact with the patient, there must a clear care and documentation methodology, which is only achieved by elaborating a CR that clearly states how the patient was interviewed, the medical check-up and the revision by systems, among others.

For them, proper filing must contain, in clear, concrete, and collaborative manner, all the information obtained product of the patient's evaluation. Thus, the CR keeps fundamental and invaluable information, which contributes to improving the patients' health.

> […] the traditional clinical record, I repeat, the motive for consultation, the current disease, the revision by systems, the physical check-up, that is another aspect that is still quite valid […] the physical exam generates trust [Interview 11].

The central phenomenon shows the contradiction the participants perceive between what it should be to fill out an ECR with quality and what it is in practice. The intentionality of being a tool at service of the clinic is distorted. They expressed concern and disappointment regarding the current filing and the role of the ECR, given that it primarily fulfills a response function to administrative and financial requirements as a quality criterion, to justify payment for services provided. Standards and regulations endorse said practices, causing care professionals to spend too much time on documentation to demonstrate the resources used in care. Some consequences include distrust in their own work, work fatigue, and disappointment in their profession, since they studied to care for patients and not to be notaries of the use of hospital supplies. They also expressed the violation of the CR, once the main tool of care work, instrumentalizing itself in favor of other interests that distance them from the patients.

> […] less than half of the clinical record in these moments is clinical; legally, it is administrative history and that is what they are evaluating as quality, and in that tangle of administrative requirements the clinical aspect is lost [Interview 1].

Records and statistics are part of multiple things we have to carry out; so, being very important, one dismisses that because in the face of the patient, for you, that is what is important [Interview 10].

The context of the mentioned contradiction between theory and practice of the ECR is a Social Security System with its standards about quality, which through regulations permanently demands information and requires greater data recording, of issues not directly related to the disease, with the risk that insurers will question the invoices and these may not be paid, due to their disagreeing, with the total or partial value of the invoice issued after the service provided. This demands numerous development of institutional information systems to meet said requirements.

Discouragement by the medical staff exists regarding aspects of the health system not related directly with the clinical and mainly due to demands for information in the ECR, and for not being able to dedicate their time exclusively to patients, worsened by possible sanctions that may be incurred by not completing the CR as expected.

> What a good note you made! The thing is, if not, they would question it. It is a real motivation, but incorrect. Even if there is no legal, judicial, administrative requirement, the history should reflect what we do [Interview 4].

> We spend more part of the care filling out the clinical record in the system than with patients, and that is not well [Interview 8].

As causes of contradiction in the registry in the CR, they manifested that, since their undergraduate and graduate training in Medicine, except for the course on semiology, there is no subject that teaches the importance of CR filing, the scope and consequences of an inadequate record.

Part of the heterogeneity found in the CR arises from the divergent instruction of the registry by the specialties in medicine. The hidden curriculum shows how "well-crafted clinical histories should be left in the hands of internists", words reinforced by professors from some specialties, who pressure students to reduce as much as possible the information contained therein.

> The quality of the clinical record depends on the branch of medicine in which you are, independent of whether if it is surgical or clinical [Interview 1].

> In the university, as such, there is no structured subject, that one would say: "how to fill out a clinical record or quality of the clinical record", but we learned that in semiology [Interview 2].

The CR reveals professional ethics, accounting for the respect doctors express for their patients, which should have been reflected when responsibly recording the entrusted information. This includes the transparent registry of what happened in the care, and by being read easily by others, leads to recognizing who it comes from, which allows learning to others.

> I believe that it is an act of commitment to the patient and of ethical responsibility with myself… because the notes talk about what I do and what I am [Interview 4].

Although it seems a current advantage, the use of information technologies and the digital culture, rather than bringing people closer, frequently distances them; this is evident in medical care, by shortening the time dedicated directly to the patient by taking more care of the registration of information.

> […] unfortunately, I think electronic clinical records have gotten us stuck to the computer and removed us from listening to patients, we omit important details due to that "technologization" that we are getting into [Interview 2].

Among the interaction relations that stand out around the contradiction in the ECR registry, there is the role it plays as instrument at the service of communication among the care staff, independent of how many participate in its filing. Clarity and chronology of the record must be inputs for the proper use by those inter-consulting.

> Sometimes I need to go over the clinical record to remember and look for things and I find them. It allows me to work on what I want to do. By registering the clinical record, I leave a message to others, and for me it is also a consultation and feedback system. So, I see a lot of value in the clinical record and in the registry [Interview 3].

> So, reading a clinical record fully reflects what the exercise of approaching the patient had meant; always with a form, a method, an order, where the patient's condition, the diagnostic impression and the plan to follow with that patient were clearly reflected [Interview 4].

The quality of the support represented by the CR depends on the doctor's communication skills. Not reading what was previously stated, not writing adequately, or not providing feedback to the staff distorts the information. Communication can be affected by lack of trust, untimeliness, indifference, or by delegating the responsibility on others, which impacts on the quality of the CR due to reprocessing and risks in care.

> […] we doctors have illiteracy […] we don't even read the clinical histories. Before we didn't read them because some doctor's scribblings couldn't be understood; now we don't read them because […] as if we did not want to listen to the other, as if we did not want to read the other; and that's where effective communication fails. Among caregivers, it is the main cause of adverse events and preventable deaths in the world [Interview 2].

It is difficult to change doctors' habits about the way they communicate and write in the CR because if they did not develop these skills during their training, or were not corrected during their professional experience regarding oral and written communication, as this limitation becomes entrenched, it can affect the timely resolution of disease. The CR elaborated with quality reflects the judgment of medical practice.

> […] make it clear, concise, which serves the patient as a document to contribute to other health providers, that helps me make things clear and that there is a common thread in the follow-up; when the patient returns, just by looking at the clinical record, I can connect with this new attention in very fluid manner [Interview 5].

As a consequence of the split between the valuation of the registry in the CR and this not being reflected in practice, it is recognized that pressure for immediacy in the current technological scenario degenerates into harmful practices, like "copy and paste", without revising and editing. This situation evidences an attitude of undervaluing the rigor of the very act of registry and facilitates incurring in cognitive bias, reflected in clinical decisions. This practice of repeatedly copying and inserting predefined texts has become widespread among health professionals, with unpredictable consequences for the patient's health, the quality of the institutional record, prolonged hospital stays, and cost overruns in care.

Although the ECR was created to optimize attention time, said purpose is not fully complied, given that there are incomplete ECR or saturated with irrelevant data due to lack of knowledge of how to use the tool, its limitations, or not updating previous information, which alters data quality.

> […] copying and pasting, seems to me a very serious problem. Filling the clinical history with repeated information, the same every day, to fulfill legal and administrative requirements, information is being redundant and useless, which makes the clinician waste time and have less contact with patients [Interview 11].

Regarding frequent information mistakes made in the ECR, clarification could be made in a new note, report the error or contact the person responsible to correct it, which will depend on the severity, keeping it from affecting the patient's safety. Timely, respectful, and concrete feedback from administrative or healthcare staff prevents and minimizes risks to the patient. The CR with quality reflects art and aesthetics when, in addition to expressing the entire care process, it generates greater trust for patients, their caregivers, and the health staff, resulting in prestige for the professional and the institution.

> […] a mistake is something one can make due to lack of knowledge, omission or simply by mistyping, a mistake that can range from minimal to serious. Errors have many facets and one must learn to receive feedback from collaborators [Interview 3].

> […] the clinical record is to doctors what the book is for the writer, and we can identify the author by that contained therein […] that manuscript can look good or bad, and one ends up recognizing a good clinical record by the author [Interview 4].

The ECR filled out with quality evidences an adequate culture of filing information by the IPS and reflects a medical practice that promotes respect for patients, the humanization of the service, complexity in the sense of what it meant to establish relevant diagnoses and treatments, human and scientific interdisciplinarity, and shared decisions not only among the health staff, but also between patients and their families.

A quality clinical record is an expression that the patient was truly the center of the care and the institutional reason for being, and that the communication revolved around him, permanently and in every way; materialized in attentive listening, not only to patients, but to their families and to all the health staff, especially the information provided by the nursing staff, who have the best context of what is happening to the patient.

During the interviews, physicians highlighted the great work by nursing and the systemic approach they have to everything that happens to the patient, in their capacity as caregivers.

> […] nursing is absolutely transcendental in caring for patients, and their records should also reflect that [Interview 4].

The CR prepared with quality reflect the judgment of medical practice, that is, what the physician thought, the diagnoses discarded or confirmed, the objectives proposed, and the medical care provided to the patient in favor of recovering health. Due to this, filing the CR must be done with responsibility and neatness, and reflect the doctor's leadership in it, who when writing adequately promotes good practices that motivate those who read it to the continuous improvement of the information consigned therein.

> That is why the clinical record is very important […] feeling motivation; it is having desire to implement other aspects from other clinical histories or the way other colleagues carry it out [Interview 5].

Discussion

Currently, the medical staff is exposed to such amount of information that it runs the risk of not sufficiently valuing the responsibility involved in the collection and rigorous registration of the data obtained as a result of the medical practice. An essential characteristic of the aforementioned process is chronological documentation in the ECR of that found, given that it contributes with more timely diagnoses, allows preventing complications [24], as well as favoring information among the healthcare staff, which results in the patient's health.

In Colombia, Resolution 3047 of 2008 affected the essence of the CR, turning it into input of administrative and financial nature for the IPS, within the context of the health system [25], by requiring doctors to justify all orders, which contributes to the rationality of prescriptions and financial sustainability, but overloads clinicians with work, an issue sufficiently supported in a prior study [16]. Evidence shows that the computerization of medicine, even if it aims to improve the health system, can generate dissatisfaction in the care staff due to difficulties in the usability of systems, insufficient technical support, and lack of support instruments for clinical decisions and timely alerts [12].

The administrative observation puts pressure on doctors in their practice. The risk of billing falls on doctors, stresses clinical action and puts other priorities above care, which causes great discouragement in clinicians. The IPS have structured ECR and incorporated new parameters to meet requirements and ensure the justification of using resources and avoid their insolvency [26]. Prior studies have demonstrated that said administrative overburden over the clinical generates frustrations due to excessive exhaustion, which ends up overshadowing their success in terms of satisfaction with their professional exercise [13].

Authentic capture of information in the ECR allows diagnoses of some pathologies without the need for other technological resources that imply higher costs, given that confirmation is not always required through laboratory exams or the use of technology [27,28]. Despite the time assigned to the consultation, the doctor can make mistakes by not writing, abbreviating or omitting information obtained from the medical practice [29,30]. Thus, the importance of their training. Learning to complete a good ECR is unavoidable in a university's Medicine study plans [31].

Ethics should be expressed in the execution of an impeccable medical practice, independent of the professional's experience, with the generation of a rigorous clinical record without discriminating by specialization practiced. It is fundamental to guarantee confidentiality about that experienced during the care and avoid the current practice of publishing in social media information of patients cared for, which reflects an absolute lack of respect. A recent study conducted with Swiss psychiatrists evidenced their concern for the difficulties experienced when sharing sensitive information about their patients with other actors and the lack of norms that regulate that practice [17].

Immediacy and the digital era, in addition to limitations in the doctors' communication skills, hinder adequate transmission of information, with clarity and rigor, in the ECR. Technology should be at the service of said purpose; hence, the responsibility of the health staff to harmonize technological progress with medical ethics. The scientific literature reports that among care staff there are diverse types of users who face differently this digital era, some with greater resistance due to fear of the unknown and the longer time it requires at the beginning. While some people accept technology easily, others refuse and must be obligated, which affects the quality of their care [14].

Studies such as this support stain inadequate practices that affect the quality when filling out the ECR, like copying and pasting prior records and evolution notes, without editing adequately, representing uncertainty and risk to patients [32]. Some time ago, it became popular to use abbreviations, acronyms and symbols indiscriminately in the physical CR, which was reproduced in the ECR, with this being counterproductive, by enabling different interpretations and causing errors in medical care. Specialized literature shows how the transition of the medical record on paper to the ECR evidenced problems associated with documentation, such as duplication. These practices violate medical language and threaten the professional, who suffers possibly legal consequences [33]. A previous study on the quality and usefulness of ECR evidences deplorable figures of compliance with criteria, such as the one carried out in Catalonia, which showed that of 1,473 ECR reviewed, only 18.3% reported a minimum registry of data of health interest [34]

The physical or electronic filing of the CR should not hinder the bond of trust between doctor and patient [35]. The clinical record must express the interpersonal approach in a way that it reflects dialogue, trust, communication, in addition to the clinical data that guarantees comprehensive care. Medical practice becomes viable when communication exists and this is strengthened in interaction, by looking, listening, reading, and understanding others [36,37]. Communication in healthcare is essential to solve problems because medical practice is nourished by the approach and recognition of the life experience of patients and their families [38].

Trust in the doctor is strengthened when what happened in the care is reflected in the ECR. That trust reduces risks when making decisions, although it does not eliminate them; therein, the importance of the equilibrium in the amount of information offered in the medical practice, since excess information can generate the contrary [39]. A proper culture of filing the clinical information will result in credibility, motivation and, hence, trust between patients and doctors. More is learnt from your own and others' mistakes than from accumulating information; thus, this culture should also be reflected in the way errors are assumed.

As limitations of this type of study, is that the generalization of the results cannot be required, given that clearly the conclusions apply to those people interviewed, but it is very likely that many physicians may see themselves reflected in the findings of the article and, thus, the transferability of hermeneutical research is achieved.

Conclusions and Recommendations

To conclude, contradiction exists between the "is-ought" of filing the ECR with quality and takes place in the practice, given that its original intentionality of being a tool at the service of clinical care is distorted, by privileging having become an instrument that responds to other factors external to the medical practice and to administrative requirements by the health system. Self-criticism by the participating internists is a call for reflection by care personnel, on the basis that a well-crafted CR benefits preserving the patient's health and life.

It is recommended to strengthen a culture of adequately filling out the ECR in the IPS, with didactic strategies and learning practices that favor reflexive and critical thinking that permits valuing the ECR not only as instrument that reflects the state of health of patients and their evolution, but also as fundamental input of the information system that supports the statistics of the health system, with direct impact on public health.

This effort would be in vain if we do not examine what is related to the curricula of higher education institutions in the medical training of the quality of the registry of the CR in the undergraduate and graduate studies continuously, and the importance of preventing the dire consequences of poor registry. Lastly, the development of ECR software must listen to and heed the recommendations by physicians from different specialties.

Acknowledgments

To the internists interviewed.

Declaration of funding source

This work was funded by Universidad de Antioquia by the time dedicated by the professor and with the researchers' own resources.

Declaration of conflict of interests

The authors declare having no conflicts of interests.

Declaration of responsibility

The authors accept responsibility in the article regarding the opinions expressed. No responsibility exists by the authors' institution of affiliation, or the funding institutions.

Declaration of authors' contributions

Lina López: substantial contribution to the conception of the article and acquisition, analysis or interpretation of the data. Participation in the design of the research work and in the critical review of its intellectual content . Approval of the final version of the manuscript submitted. Capacity to respond to issues related with the precision or integrity of any part of the work

Carlos Yepes: substantial contribution to the conception of the article and acquisition, analysis or interpretation of the data. Participation in the design of the research work and in the critical review of its intellectual content . Approval of the final version of the manuscript submitted. Capacity to respond to issues related with the precision or integrity of any part of the work

Referencias

1 Díaz Hernández DP. Una visión sucinta de la enseñanza de la medicina a lo largo de la historia: I. Desde el antiguo Imperio egipcio hasta el siglo XVII. Iatreia [internet]. 2011 [citado 2022 nov. 18]; 24(1):90-6. Disponible en: https://www.redalyc.org/articulo.oa?id=180522540010

2 Fombella Posada MJ, Cereijo Quinteiro MJ. Historia de la historia clínica. Galicia Clín [internet]. 2012 [citado 2022 nov. 18]; 73(1):21-6. Disponible en: https://galiciaclinica.info/PDF/16/291.pdf

3 Cooke M, Irby DM, et al. American medical education 100 years after the Flexner report. N Engl J Med. 2006;355:1339-44. DOI: https://doi.org/10.1056/NEJMra055445

4 Liu S, Zeng R. Denomination, format, and content of medical record. En: Hong X, Rui Zeng W, editores. Handbook of Clinical Diagnostics. Chengdu: Springer; 2020. pp. 373-85. DOI: https://doi.org/10.1007/978-981-13-7677-1

5 Blanco Alvarado DJ. La historia clínica: algunos comentarios desde la medicina y el derecho. Verba Iuris. 2019;(42):153-62. DOI: https://doi.org/10.18041/0121-3474/verbaiuris.42.5665

6 Añel R, García I, et al. Historia clínica y receta electrónica: riesgos y beneficios detectados desde su implantación. Aten Primaria. 2021;53(1):1-11. DOI: https://doi.org/10.1016/j.aprim.2021.102220

7 Organización Mundial de la Salud (OMS). Informe sobre la salud en el mundo. La financiación de los sistemas de salud. El camino hacia la cobertura universal [internet]. OMS; 2010 [citado 2022 nov. 25]. Disponible en: https://apps.who.int/iris/handle/10665/44373

8 Boerma T. A global commitment to improve health data [internet]. World Health Organization; 2015. pp. 1-4 [citado 2022 sep. 29]. Disponible en: https://apps.who.int/mediacentre/commentaries/improving-health-data/en/index.html

9 Colombia. Congreso de la República. Ley 100, por la cual se crea el sistema de seguridad social integral y se dictan otras disposiciones" [internet]. (1993 diciembre 23) [citado 2022 sep. 29]. Disponible en: https://www.funcionpublica.gov.co/eva/gestornormativo/norma_pdf.php?i=5248

10 Colombia. Ministerio de Salud. Resolución 1995, por la cual se establecen normas para el manejo de la historia clínica [internet] (1999 julio 8) [citado 2022 sep. 29]. Disponible en: https://www.minsalud.gov.co/Normatividad_Nuevo/RESOLUCI%C3%93N%201995%20DE%201999.pdf

11 Wang Z, Talburt JR, Wu N, et al. A rule-based data quality assessment system for electronic health record data. Appl Clin Inform. 2020;11(4):622-34. DOI: https://doi.org/10.1055/s-0040-1715567

12 Baule CP, Kusma Fidalski SZ, Chong Neto HJ, et al. Pesquisa de satisfação dos médicos de família do Brasil com o uso de prontuários eletrônicos. APS. 2022;25(Supl. 2):121-38. DOI: https://doi.org/10.34019/1809-8363.2022.v25.35324

13 Johnson KB, Neuss MJ, Detmer DE. Electronic health records and clinician burnout: A story of three eras. J Am Med Inform Assoc. 2021;28:967-73. DOI: https://doi.org/10.1093/jamia/ocaa274

14 Raman SR, Curtis LH, Temple R, et al. Leveraging electronic health records for clinical research. Am Heart J. 2018;202:13-19. DOI: https://doi.org/10.1016/j.ahj.2018.04.015

15 Chá Ghiglia MM. Historia clínica electrónica: factores de resistencia para su uso por parte de los médicos. Rev Méd Urug. 2020;36(2):163-70. DOI: https://doi.org/10.29193/rmu.36.2.6

16 Hobensack M, Ojo M, Bowles K, et al. Home healthcare clinicians' perspectives on electronic health records: A qualitative study. Stud Health Technol Inform. 2021;284:426-30. DOI: https://doi.org/10.3233/SHTI210763

17 Rowlands S, Tariq A, Wood M, et al. A qualitative investigation into clinical documentation: Why do clinicians document the way they do? Health Inf Manag. 2022;51(3):126-34. DOI: https://doi.org/10.1177/1833358320929776

18. Chivilgina O, Elger BS, et al. "What's the best way to document information concerning psychiatric patients? I just don't know"–A qualitative study about recording psychiatric patients notes in the era of electronic health records. PLoS One. 2022;17(3):e0264255. DOI: https://doi.org/10.1371/journal.pone.0264255

19 Strauss A, Corbin J. Bases de la investigación cualitativa. Técnicas y procedimientos para desarrollar la teoría fundamentada [internet]. Medellín: Editorial Universidad de Antioquia; 2002 [citado 2022 nov. 23]. Disponible en: https://cutt.ly/Z1i7qSv

20 Charmaz K. Constructing Grounded Theory a Practical Guide through Qualitative Analysis. London: Sage; 2006.

21 Asamblea General de la Asociación Mëdica Mundial (AMM). Declaración de la AMM sobre las consideraciones éticas de las bases de datos de salud y los biobancos [internet]. 2002 [citado 2022 nov. 25]. Disponible en: https://bit.ly/3u5yci1

22 Colombia. Ministerio de la Protección Social. Resolución 8430, por la cual se establecen las normas científicas, técnicas y administrativas para la investigación en salud [internet]. (1993 octubre 4) [citado 2022 nov. 25]. Disponible en: https://bit.ly/3tXvvz1

23 Colombia. Ministerio de la Protección Social. Resolución 2378, por la cual se adoptan las Buenas Prácticas Clínicas para las instituciones que conducen investigación con medicamentos en seres humanos [internet]. (2008 junio 27) [citado 2022 nov. 25]. Disponible en: https://bit.ly/3Xzdkx8

24 Palacios E, Clavijo-Prado C. Semiología de la crisis epiléptica: un reto clínico. Repert Med Cir; 2016;25(4):203-9. DOI: http://dx.doi.org/10.1016/j.reper.2016.10.007

25 Colombia. Ministerio de Salud y Protección Social. Resolución 3047 de 2008 modificada por la resolución 416 de 2009. Manual único de glosas, devoluciones y respuestas unificación [internet]. 2009. [citado 2022 nov. 25]. Disponible en: https://shre.ink/1AQ2

26 Villadiego A, Torres X. Causales de glosas y su impacto financiero en las entidades sociales del Estado de Colombia. [Tesis de especialización] [PhD Thesis]. Santiago de Cali; 2020.

27 Lifshitz A. Reivindicación de la clínica. Medicina Interna México [internet]. 2018 [citado 2022 nov. 18]; 34(4):513-5. Disponible en: https://medicinainterna.org.mx/article/reivindicacion-de-la-clinica/

28 Felli L, Garlaschi G, Muda A, et al. Comparison of clinical, MRI and arthroscopic assessments of chronic ACL injuries, meniscal tears and cartilage defects. Musculoskelet Surg. 2016;100(3):231-8. DOI: https://doi.org/10.1007/s12306-016-0427-y

29 Esteban E, Ochoa P, Ruiz FJ. Anamnesis y su relevancia, a propósito de un caso: isquemia arterial por aneurisma poplíteo. Semergen. 2016;42(5):344-5. DOI: https://doi.org/10.1016/j.semerg.2015.05.006

30 Eze-Nliam C, Cain K, Bond K, et al. Discrepancies between the medical record and the reports of patients with acute coronary syndrome regarding important aspects of the medical history. BMC Health Serv Res. 2012;12:78. DOI: https://doi.org/10.1186/1472-6963-12-78

31 Laso Guzmán FJ. Importancia de la semiología en la era tecnológica. Med Clin. 2017;148(12): 559-61. DOI: https://doi.org/10.1016/j.medcli.2016.12.012

32 Dean SM. EHR copy and paste and patient safety. Patient Saf Netw [internet]. 2018 [citado 2022 nov. 18] Disponible en: https://psnet.ahrq.gov/perspective/ehr-copy-and-paste-and-patient-safety

33 Araujo J. Reflexiones en torno al lenguaje médico actual, los epónimos y abreviaciones. Las razones de su existencia y los principales problemas que plantea su uso. Biosalud. 2017;16(1):93-104. DOI: https://doi.org/10.17151/biosa.2017.16.1.10

34 Sobrequés Soriano J, Piñol Moreso JL. Historia clínica de atención primaria: calidad y factores asociados. Aten Primaria [internet]. 2001 [citado 2022 nov. 30]; 28(8):535-42. Disponible en: https://www.elsevier.es/es-revista-atencion-primaria-27-articulo-historia-clinica-atencion-primaria-calidad-13023839

35 Bonilla I. Revisión por sistemas en la historia clínica del paciente. Elsevier Connect [internet]. 2018 [citado 2022 nov. 18]; Disponible en: https://www.elsevier.com/es-es/connect/estudiantes-de-ciencias-de-la-salud/revision-por-sistemas-en-la-historia-clinica-del-paciente

36 Urteaga E. La teoría de sistemas de Niklas Luhmann. Contrastes [internet] 2010 [citado 2022 nov. 30]; 15:301-17. Disponible en: https://revistas.uma.es/index.php/contrastes/article/view/1341/1292

37 Escobar YNV, Fong EJA, Terazón MO, et al. La relación médico-paciente: ¿necesidad o conveniencia? Rev Cubana Med [internet]. 2019 [citado 2022 nov. 30]; 58(1):1-15. Disponible en: https://www.medigraphic.com/pdfs/revcubmed/cm-2019/cm191d.pdf

38. Skylar-Scott IA, Wu BJ. Humanizing the Electronic Medical Record with the Personal Fact. Am J Med. 2017;130(7):291-2. DOI: https://doi.org/10.1016/j.amjmed.2017.02.027

39. Niklas L. Confianza: Introducción Darío Rodriguez Mansilla. Editorial Anthopos; 2005.