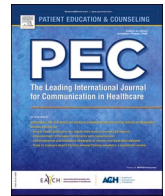


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The electronic health record as an interactional and epistemic resource: Insights from pediatric well-child visits

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ABSTRACT

Objective: Electronic health records (EHRs) have increasingly become integral to contemporary medical consultations, including pediatric care. This study aims at exploring the interactional use of the EHR during naturally occurring pediatric well-child visits, focusing specifically on how pediatricians and parents manage knowledge concerning infants' growth inscribed in the EHR.

Methods: Conversation analysis is used to analyze 23 video-recorded Italian well-child visits involving two pediatricians and twenty-two families with children aged 0–18 months.

Results: The analysis focuses on the delicate activity of assessing infants' growth, a widespread parental concern. It illustrates how a no-problem assessment is collaboratively achieved through the interactional mobilization of the EHR. While parents draw upon their experiential knowledge to assess their child's "normality" (or not), pediatricians resort to expert knowledge inscribed in the EHR (e.g., growth percentiles and growth charts), thereby making the EHR a locally and institutionally relevant agent in the interaction.

Conclusion: A hierarchy of types and sources of knowledge is presupposed and ratified by both parents and pediatricians in these visits. Expert information inscribed in the EHR is collaboratively built as the most authoritative voice to the detriment of parent-reported experiential knowledge.

Practice implications: While acknowledging potential risks, leveraging the EHR can be a valuable interactional and epistemic resource for healthcare professionals working in pediatric care to a) soothe parental concerns regarding infants' development, and b) offer evidential support for their evaluations, thereby displaying professional accountability.

1. Introduction

Contemporary healthcare contexts are increasingly permeated by digital, computer-based technologies. One of the most visible and pervasive manifestations of the progressive shift from paper and pen to digitalized practices is the introduction of the electronic health record (hereafter, EHR), which has significantly reshaped medical interactions and the delivery of patient-centered care in recent decades [1–3].

In pediatric care, the EHR is extensively used by pediatricians to perform a wide range of tasks, including recording diagnostic and medication data, accessing laboratory results, storing patient demographics and anamnestic information, documenting clinical notes, and checking compliance with screening tests and immunizations [4,5]. Along with these functionalities, the EHR is particularly used during well-child visits to support one of the pivotal goals of these visits: the assessment of children's growth.

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Well-child visits are routine check-ups during which the healthcare provider (typically a pediatrician or pediatric nurse) examines and tracks the child's growth as well as their cognitive, psychomotor, emotional, and social development.¹ Growth charts are the primary clinical tool used by professionals to assess children's physical growth. Integrated into the EHR, these charts feature percentile curves that represent the distribution of various body measurements (e.g., weight, length, and head circumference) over time. The EHR system automatically plots the child's growth chart by comparing the current growth values measured during the physical examination with those recorded during previous visits and with the established age- and sex-specific growth standards.²

Although communicating the growth assessment outcome to parents is a core component of pediatricians' everyday professional practice, prior research has mainly focused on acute and specialized pediatric settings paying attention to caregivers' participation in decision-making and treatment delivery as well as children's involvement in the interaction (for a recent review, see [6]). However, the specific domain of infants' everyday care and rearing and the discursive accomplishment of well-child visits remain relatively less explored (but see [7–11]). More specifically, the actual, situated deployment of the EHR during the unfolding of pediatrician-parent interaction and, particularly, in the accomplishment of growth assessment, remains largely unexamined (but see [12]). The present study aims to fill this gap by exploring the interactive use of the EHR during well-child visits, focusing particularly on how pediatricians and parents manage knowledge concerning infants' growth inscribed in the EHR.

The significance of this study is twofold. First, as well-child visits are crucial for monitoring children's health and development during the critical first thousand days of life [13], gaining an in-depth understanding of how the EHR is embodied within practical courses of action can help identify ways to align computer use with patient- and family-centered communication [14]. In turn, this may benefit parents' trust and satisfaction as well as contribute to children's long-term health. Second, there is evidence that parental misunderstandings about growth charts are quite common [15–18], often leading to incorrect or imprecise interpretations and, above all, emotional stress and concern over their child's "normality" [19]. Uncovering how expert knowledge contained in the EHR is mobilized *in vivo* by pediatricians allows us to detect valuable endogenous strategies (i.e., already part of professionals' everyday communicative repertoire) to improve shared understanding of growth charts and provide parental support.

Using Conversation Analysis (CA) theoretical and analytical constructs [20] to analyze a corpus of 23 video-recorded well-child visits, this article illustrates how parents and pediatricians collaboratively achieve a no-problem assessment of infants' growth through the interactional mobilization of the EHR, and how this brings about consequences on the epistemic landscape of the visit.

2. Background

This article builds on literature on epistemics in social interaction [21] and healthcare technologies in practice [22,23]. Particularly, it contributes to these two branches of research by providing fresh data and new insights into the issue of epistemic asymmetry and

accountability in pediatrician-parent interaction on one side, and the interactional use of the EHR, on the other.

2.1. Epistemic asymmetry and accountability in healthcare interaction

Research on doctor-patient interaction has grown significantly over the past 40 years [24]. Drawing on an observational, micro-analytic approach to the study of video-recorded, naturally occurring interactions (i.e., not elicited for research purposes), CA scholars have systematically investigated a wide range of healthcare settings, including primary, secondary, tertiary, and emergency care [25–28]. Among the substantial body of findings accumulated over the years, a considerable portion of studies has focused on epistemic asymmetries between physician and patient as a core and constitutive feature of healthcare interactions (see among others [29–31]). Epistemic asymmetry refers to the unequal distribution of relevant knowledge, where patients' first-hand, experiential knowledge of their body and symptoms is ordinarily inspected and assessed by the physician who holds biomedical expert knowledge. In other words, physicians retain epistemic primacy and responsibility to diagnose and prescribe treatment, which is allegedly out of the patient's lay domain [32].

Over the last decades, research has documented a shift in the physician-patient relationship: the heavily asymmetrical, paternalistic approach dominating clinical practice until the late '60s [33,34] has been criticized and gradually replaced by a more egalitarian model also known as "patient-centered care" [35,36]. The push for reducing physicians' authority and, at the same time, boosting patients' involvement in decision-making resulted in profound changes in doctor-patient communication [37]. On the one hand, patients are found to advance interpretations of their own [38], issuing "lay diagnosis" [39], and increasingly more often resist practitioners' diagnosis and recommendations [40,41], even though in ways that still orient to the physician's epistemic authority in the biomedical domain [42,43]. On the other, physicians deliver more insights into diagnostic and treatment reasoning [42,44], providing accounts for the evidential ground of their assessment [43,45].

This transformation is also at stake in pediatric consultations, where parents display themselves as competent and knowledgeable subjects [46–48] as well as "surrogate decision makers" ([49], p. 63) for their children. Research has shown that contemporary parents do not appear reluctant to assert their epistemic rights by mobilizing their preferences, expectations, previous experiences, and first-hand knowledge of their children's everyday life, but still without overtly undermining pediatricians' epistemic authority [7,50]. Concurrently, scholars documented different communicative strategies adopted by pediatricians to display accountability [7,51] and even persuade parents to accept the diagnostic and treatment outcome, thereby patrolling the boundaries of their expertise-based authority [49].

Conceiving epistemic asymmetries as a joint local accomplishment of participants' communicative conduct rather than a pre-determined, overarching structure, this article sheds light on the interactive use of the EHR as an epistemic resource used by pediatricians to account for their assessment and, at the same time, ratify their ultimate epistemic authority.

2.2. The EHR in practice

Since the introduction of new technologies in healthcare contexts, researchers and policymakers have been concerned with their impact on healthcare delivery and doctor-patient interaction. CA research has been pioneering in delving into "the practical circumstances in which medical

¹ In particular, in the age range from 0 to 18 months, pediatricians measure the child's weight, length/height, and head circumference; they do neurosensory screening and evaluate the child's sight and hearing; they perform behavioral, social, emotional, and developmental screening; they inform parents about immunization programs; they answer any possible questions or concerns regarding childcare.

² Growth standards are based on the latest World Health Organization (WHO) guidelines that implemented standardized procedures for measuring and interpreting anthropometric results.

technologies are used” [52], p. 5] and how they are embedded within institutionally relevant courses of action. The seminal works by Greatbatch and colleagues [53,54] have formerly illustrated how the deployment of EHRs significantly influenced both doctors and patients, resulting in an intricate attunement between computer use and participants’ conduct. Their findings suggest that computer-based activities were more prominent and demanding than paper-based ones, leading to reduced gaze at the patient, extended gaps between turns at talk, shorter, less detailed responses to patient requests, and sudden topic shifts to retrieve necessary information from the system. Concurrently, patients were found to subtly adjust their talk and multimodal behavior with computer use, for instance by avoiding interrupting the doctor’s ongoing activity or synchronizing their gaze and talk with keyboard typing. More recent observational, micro-analytic studies have shed light on how professionals manage the use of the EHR to accomplish a multiplicity of institutional tasks while interacting with patients [55–59]. Overall, these studies suggest that the affordances of these digital artifacts “do not depend on their technical or material characteristics but rather on the courses of action and communication they produce and support” [60] p. 4]. It is in and through the details of social interaction that the EHR gains meaning and shapes the unfolding of the visit: the subtle interplay between talk, gaze directions, body orientation, silences, and gestures contribute to foster or hinder patient participation and agency.

The interactional aspects of the use of EHRs during healthcare consultations are strictly interwoven with epistemic considerations. Despite the expectation, especially spread among policymakers, that this technology would help flatten hierarchies between doctors and patients and foster patient engagement and shared decision-making, to date there is little evidence supporting this [61]. While patients have first-hand knowledge of their illness experience and access to the EHR, they do not necessarily master expert knowledge essential to interpreting the diagnostic and therapeutic information provided by the doctor and inscribed within the EHR. Furthermore, prior research highlighted that information recorded in the EHR (likewise paper-based medical records)³ is typically treated as more “objective” and authoritative than the “subjective”, experiential-based reports of the patient’s health status [58,59,68,69]. For example, [56] has shown that in general practice physicians may resort to information on the EHR to engage in the delicate activity of validating or challenging the patients’ own version. Similarly, [69] has emphasized that by looking at the EHR when issuing questions to the patient, the physician may convey that the computer contains more reliable information than the one reported by the patient. In this way, the EHR contributes “to the construction of certain hierarchies of knowledge wherein some forms of knowledge are treated as more ‘valuable’ than others” (p. 25).

Drawing on the literature on technology in practice delineated so far, this article uncovers how the EHR is deployed as an interactional and epistemic resource to accomplish the delicate activity of assessing infants’ growth during well-child visits.

3. Methods

This article reports data from 23 videorecorded pediatric well-child visits involving two general pediatricians and twenty-two

middle-class families with children aged 0–18 months. The study was conducted in two public pediatric clinics in a northern Italian city. Participants were recruited by the author via convenience sample. All participants provided written consent in compliance with the EU Regulation n. 2016/679 (GDPR) and Italian law n. 196/2003. Ethical approval was granted by the Bioethics Committee of the University of Bologna.

The overall research question was to understand whether and how the EHR features in the accomplishment of infants’ growth assessment. Data have been observed to identify episodes wherein the EHR was mobilized by the pediatrician during the growth assessment phase of the visit. After repeated scrutiny of the data, it was noticed that pediatricians consistently resort to the EHR through different multimodal resources (e.g., gaze direction, body posture, gestures, or verbal deixis). These episodes were verbatim transcribed by the author using Jeffersonian conventions [70] (see Appendix A) enriched with notations for gaze, gestures, and body movements when ostensibly relevant for participants as a means to unfold the interaction. Data were analyzed adopting a conversation analysis (CA) approach [20,71], which is a rigorous qualitative method extensively applied to the study of health-care naturally occurring interactions (for a recent review, [72]). Although not allowing generalization, CA offers a uniquely in-depth understanding of the situated, moment-by-moment use of technology in practice and the co-constructed nature of epistemic asymmetries. Transcripts are presented in two lines: original Italian and an almost literal English translation. All names have been fictionalized for privacy reasons.

4. Results

The following examples illustrate how the EHR is deployed during the growth assessment phase of the visit. The analysis shows that a no-problem assessment is collaboratively achieved by pediatricians and parents through the interactional mobilization of the EHR. While parents draw upon their experiential knowledge to assess their child’s “normality” (or not), pediatricians resort to expert knowledge inscribed in the EHR, thereby making the EHR a locally and institutionally relevant agent in the interaction. The excerpts have been selected for their representativeness of the phenomenon in the corpus.

Ex. 1 - PI_05 (18.39–19.00)

M: mother P: pediatrician G: grandmother

The excerpt is drawn from a visit of a 5-and-a-half-month-old baby who underwent a period of hospitalization due to bronchiolitis. During the physical examination phase of the visit, the mother expressed several times concern for her son’s growth, which she considered inadequate. In particular, she first reported that the baby’s weight she measured at home differed from the value reported by the pediatrician, and then she mentioned that a resident at the hospital told her a low height measurement.⁴ We join the conversation during the assessment phase of the visit, immediately after P has reported the numerical values for the infant’s height, weight, and head circumference on the EHR. P is sitting at the desk looking at the computer; G is sitting in front of him while M is dressing the baby on the couch and is momentarily out of the view of the video camera.

³ Scholars working in different (but at times intertwined) research traditions like ethnomethodology, workplace studies, or healthcare communication studies, have largely investigated the role of *paper-based* medical records as artifacts that shape, and are shaped by, situated organizational, socio-material, and interactional features [62–67].

⁴ For space reasons, the mother’s displays of concern are not transcribed.

- 1 P eh lui sì è- è- è tutto nelle medie,
well yes everything is- is- is on average, ((gaze and chest toward the EHR))
- 2 P anche l'altezza:::
also the hei:::ght ((gaze and chest toward the EHR))
- 3 P è tutto al cinquantesimo anche lui,=
everything is at the fiftieth for him too,= ((gaze and chest toward the EHR))
- 4 M =perfetto.=
=perfect.=
- 5 P =quindi non ha perso niente [come:] peso,
=so he hasn't lost anything [i:n] weight, ((gaze and chest toward the EHR))
- 6 M [bene].
[good].
- 7 P come crescita è: (.) una crescita nella media.
as for the growth i:s (.) a growth on average.((gaze and chest toward the EHR))
- 8 M benis[simo].
very [good].
- 9 G [bene bene].
[good good].

At the beginning of the excerpt, P provides an assessment of the infant's growth by depicting the measurements acquired during the physical examination as being "on average" ("well yes everything is- is- is on average", line 1). In doing so, he proffers a no-problem evaluation of the infant's growth by mobilizing expert knowledge (i.e., statistics) inscribed in the EHR. Indeed, note that his gaze and chest are turned toward the computer (line 1, Fig. 1). Then, although the "transition relevant place" [73] has been potentially reached, P expands his turn and specifies that the baby is at the fiftieth percentile also for height (lines 2 and 3). By continuing to rely on the EHR (see the gaze and chest direction in lines 2 and 3), P contrasts his expert-based, no-problem evaluation with the content of the previously reported problematic experience-based assessment of M: a hospital resident provided a low height measurement, suggesting that the baby's height "was not enough" (not transcribed). Concurrently, by mobilizing expert knowledge inscribed in the EHR (i.e., percentile curves, "everything is at the

fiftieth for him too", line 3), P constructs the infant's growth as statistically normal, and therefore unproblematic[12]. Furthermore, by addressing M's worry about the baby's height displayed earlier in the conversation, he also mitigates her emotional distress and provides reassurance. M's following marked good news receipt ("perfect", line 4) seems to suggest that this subtle interactional and epistemic work carried out by the pediatrician (also) through the mobilization of the EHR "works": M's turn conveys her understanding of both the semi-expert term ("on average", line 1) and the specialized and even elliptical expression ("at the fiftieth", line 3) of P's turns, and contributes to ratify knowledge inscribed in the EHR as *the* authoritative voice, i.e., it is treated as more reliable than the resident's assessment reported by M. Furthermore, it also arguably indicates M's relief for the growth assessment outcome.

Although the sequence can be considered technically closed, P further expands his trajectory and formulates his prior statistically-

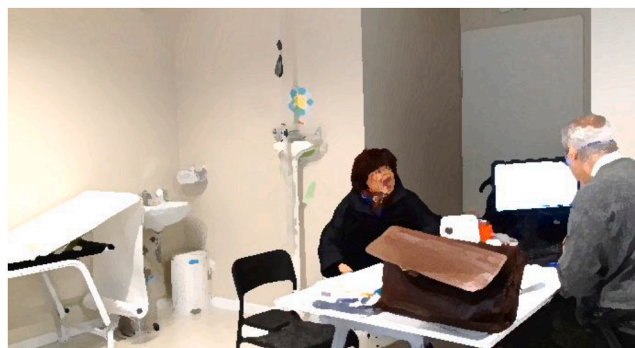


Fig. 1. P is looking at and turned toward the EHR.

formatted assessment in lay terms (“so he hasn’t lost anything in weight”, line 5). In and through this translation [12], P specifies the non-problematic nature of the baby’s weight, which on the contrary was treated as problematic by M during the physical examination stage: the mother reported that the baby’s weight measured by herself at home was lower (not transcribed). In a few words, P’s recruitment of the EHR through multimodal conduct is once again functional to contrast his expert-based no-problem assessment with the lay, experiential-based assessment of the mother. In so doing, he patrols his domain of expertise related to interpreting the growth values. However, by avoiding explicitly contradicting the content of M’s report, he also manages to

daughter’s growth, which she deemed inadequate.⁵ More specifically, she first argued that the baby’s height, just measured by P, was lower than the value reported at the last visit. Then, before P even measured the baby’s weight, M stated that since the baby is not eating at home, she must have lost weight.

We join the interaction during the assessment stage, immediately after P has measured the baby’s weight (i.e., 11.2 kilos) and entered the anthropometric results on the EHR. Contrary to M’s expectation, the baby has gained weight. P is sitting at the desk looking at the monitor, while M is dressing the baby on the couch.

- 1 P allora l’altra volta era?=
so last time she was?=*((looking at the patient file on the desk))*
- 2 M =era dimagrita bo, tre etti?
=she lost I don’t know, three hectograms?*((dressing the baby on the couch))*
- 3 M ^era dieci chili.
^she was ten kilos.*((dressing the baby on the couch))*
- 4 P ^*((looks and turns her body toward the EHR))*
- 5 P †dieci,
†ten,*((nodding and looking at the EHR))*
- 6 (0.5) *((P looks at the EHR, M dresses the baby))*
- 7 P ostia ragazzi è cresciuta un †sacco
damn guys she grew up a †lot*((gaze and body toward the EHR))*
- 8 M pensi †un po’
imagine †that

preserve solidarity with M as much as possible and takes care of her concern.

Then, and after M’s further display of understanding and affiliation (“good”, line 6), P keeps recruiting expert knowledge inscribed in the EHR (see gaze and chest direction, line 7) and proffers an overall no-problem growth assessment (“as for the growth is: (.) a growth on average”, line 7). In this way, P contributes to constructing growth curves as the ultimate, trustworthy source of relevant knowledge when it comes to assessing infants’ growth (as opposed to M’s experiential knowledge). However, at the same time, he addresses M’s worry by treating her son’s growth as non-problematic and statistically typical. The excerpt ends with M’s and G’s upgraded positive assessments (“very good”, line 8; “good good”, line 9). Through this strong alignment with P’s no-problem assessment, M and F contribute to ratifying the EHR, and more precisely knowledge inscribed within it, as the most authoritative voice.

The next excerpt illustrates another example of how the EHR is used as an interactional and epistemic resource.

Ex. 2 – VA_05 (6.45–7.20)

M: mother P: pediatrician

The excerpt is drawn from a visit of a 1-year-old baby. During the physical examination, the mother expressed concern about her

At the beginning of the excerpt, P is looking for information about the baby’s weight recorded during the last visit (“so last time she was=?”, line 1). While issuing this question, P glances at the patient’s file in front of her on the desk, conveying the idea that this information is inscribed in the patient’s record. Even though M has not been clearly selected as the addressee of P’s question, she provides an answer by mobilizing her first-hand knowledge: last time the baby was ten kilos (see lines 2 and 3). In this way, she establishes her epistemic right to know her daughter’s idiosyncratic growth measurement. However, note that while M issues such a reply, P visibly turns toward the computer and starts looking at the EHR (line 4, Fig. 2), thereby projecting the sense that relevant and reliable information is included within it (on the interactional practice of looking to the EHR to seek for an answer, see [69]). Then, immediately after, she confirms the content of M’s answer by nodding and reading aloud with emphasis the numerical value included in the EHR, which corresponds to the one reported by M (“†ten”, line 5). By mobilizing the EHR in this specific multimodal way and sequential position, P does different things. First, she establishes the EHR as the most reliable source of relevant information (as opposed to the mother’s first-hand knowledge), thereby constructing it as the epistemic authority. Furthermore, by the very act of confirming the content of M’s reply, she displays her own epistemic right related to

⁵ For space reasons, the mother’s displays of concern are not transcribed.



Fig. 2. P looks and turns her body toward the EHR.

knowing the baby's growth measurement (on the use of paper records to confirm a patient's report, see also [67]; on confirmation in second position as displays of epistemic authority, see among others [74]). At the same time, through the way P prosodically constructs her turn, she projects a no-problem trajectory (see the emphasis and the high pitch while proffering the word "ten", line 5).

After a small gap during which P keeps working on the computer and M finishes dressing the baby on the couch (line 6), P reinforces the no-problem assessment of the baby's growth ("dams guys she grew up a lot", line 7). Even though P's turn is designed with a lay, everyday register in the form of an "extreme case formulation" (see the interjection "damn guys" in turn initial position and the upgrading element "a lot"; [75]), P *de facto* ratifies information inscribed in the EHR as the legitimate basis for producing and delivering her assessment (see P's gaze direction and body posture in line 7). As a matter of fact, the EHR is mobilized, on the one hand, to contrast the content of M's previous first-hand-based problematic assessment about the baby's weight (according to M, the baby is not eating at home, and therefore her weight has not increased; not transcribed), while on the other hand, it works as a means to address such maternal concern and provide an expert-based, "objective" reason to soothe her anxiety. However, through the way P designs her turn, she avoids explicitly contradicting M's first-hand report thereby preserving the relationship with her.

P's no-problem assessment is met with a prosodically emphasized expression of surprise by M ("imagine ↑that," line 8), which signals her positive reception of this "good news" [76] and arguably indicates her reassurance for the growth assessment outcome. Furthermore, by aligning with P's trajectory, M also contributes to ratifying knowledge inscribed in the EHR as *the* authoritative voice (i.e., it is interactionally constructed as more reliable than M's lay assessment).

In a nutshell, the extremely sophisticated interactional and epistemic work accomplished by the pediatrician (also) through the mobilization of the EHR seems to be effective in the moment-by-moment unfolding of the interaction.

5. Discussion

This study has empirically illustrated that the EHR is deeply entrenched in the accomplishment of everyday institutional tasks and activities of contemporary pediatric well-child visits [77], particularly when the assessment of infants' growth is at play.

As the detailed analysis has shown, the EHR is mobilized through different multimodal resources, first and foremost gaze and body direction toward the monitor.

In line with previous studies on the use of healthcare technology in practice [53–59], this result confirms the crucial role of multimodal conduct in managing the EHR while concurrently carrying out different activities equally relevant to the institutional goals of the visit and the pediatrician-parent relationship. The pediatricians' fixed gaze at the

EHR screen together with the body orientation toward it (see ex. 1 and ex. 2) reveal the prominent role of computer-based technologies in the unfolding of the growth assessment activity. However, as suggested by the lack of significant gaps, hesitation markers, interruption of the business at hand, or dispreferred actions (see ex. 1 and ex. 2), such consistent engagement with the computer seems not to disrupt the flow of the interaction. Contrary to the former findings by [53,54], in this corpus the deployment of the EHR does not appear to undermine the simultaneous management of computer use and interaction with parents. This difference may be due to several factors, including the likely greater familiarity of contemporary physicians and families with computer-based technologies.

Furthermore, this study contributes to research on epistemic asymmetries in healthcare interactions [29]. As the cases examined perspicuously illustrate, when the parents in this corpus make actionable their first-hand, experiential knowledge of the baby's treated-as-problematic idiosyncratic growth (e.g., the mother's self-managed baby's weight measurement, ex.1; or the mother's report of the baby not eating at home, ex. 2), the pediatricians are likely to draw upon expert knowledge inscribed in the EHR (e.g., percentile curves, ex. 1; or exact numerical values, ex. 2) to pursue a no-problem assessment trajectory.⁶ In this way, the EHR is built as a locally and institutionally relevant epistemic agent thereby contributing to shaping asymmetries and authority in the consultation.

6. Conclusion

The micro-analysis of interactional details unveils how the no-problem assessment accomplished through the deployment of the EHR is collaboratively achieved by both pediatricians and parents. By aligning with the pediatricians' evaluation and refraining from questioning its evidential basis, parents ratify the expert-based "version of reality" [[69], p. 24] presented by the pediatricians through the EHR. It is precisely this subtle interactional dynamic that makes visible how a hierarchy of types and sources of knowledge is presupposed and ratified by both parties in these visits: expert information inscribed in the EHR is collaboratively built as *the* most authoritative voice to the detriment of parent-reported everyday knowledge. In other words, the interactional construction of knowledge hierarchies corroborates the "remarkable persistence of asymmetry" in healthcare encounters [31]. However, while pediatricians do patrol the boundaries of their expertise, this does not necessarily entail a threat to the parents' "face" [78]: when it comes to assessing infants' growth, which is a common source of parental concern, the pediatricians in this corpus avoid explicitly contradicting the parents' experience-based claims, thereby orienting to preserving solidarity with them as much as possible.

6.1. Practice implications

This study has shown how the interactional mobilization of the EHR during infants' growth assessment has consequences on the local management of epistemic asymmetries and authority. The fact that expert knowledge inscribed in the EHR is co-constructed as more valuable than parents' voice risks delegitimizing caregivers' experience and lay knowledge of their children's everyday habits and day-to-day health. Furthermore, intensive computer use may disrupt the interactional organization of the visit: by gazing at the monitor instead of the parent, avoiding explaining the activity conducted within the EHR, or refraining from sharing the screen with the parent, pediatricians risk conveying a sense of disengagement with the parent [60]. This can, in turn, compromise parents' participation in the consultation, ultimately undermining patient- and family-centered care and therapeutic alliance.

⁶ Importantly, the visits in this corpus do not involve cases of "atypical" growth.

However, leveraging the EHR can also serve as a valuable interactional and epistemic resource for healthcare professionals working in pediatric care. As this study has empirically shown, the EHR can be effective in soothing parental concerns regarding their infants' development, fulfilling a reassuring function. Along with supporting parents, the mobilization of expert knowledge inscribed in the EHR allows pediatricians to make explicit the evidential ground upon which their "diagnostic" conclusions are drawn, thereby balancing authority with professional accountability [43,45]. This can foster a shared understanding of growth charts and promote patient- and family-centered care.

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Appendix A

Transcription conventions adapted from Jefferson [70]

,	Slightly upward intonation
?	Upward intonation
.	Falling intonation
[Onset of overlapping talk
]	End of overlapping talk
=	Latching
(0.0)	Silences in tenths of a second
(.)	Brief interval of less than two-tenths of a second
wo:::rd	Prolongation of the immediately prior sound
wo-	Abrupt cut-off or self-interruption of the sound in progress
(word)	Talk is dubious
word	Stress or emphasis
((words))	Transcriber comments and descriptions
°word°	Quieter talk
WORD	Louder talk
>word<	Faster talk
<word>	Slower talk
^	Starting point of correspondence between an embodied conduct and a stretch of talk
↑	Higher pitch
↓	Lower pitch

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agencies in the public, commercial, or not-for-profit sectors.

CRedit authorship contribution statement

Federica Ranzani: Conceptualization, Data curation, Formal analysis, Methodology, Writing – original draft, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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