BRIEF REPORT

General Medicine

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Humanistic Charting: Empowering Person-centered Emergency Care Through Reimagining the Electronic Health Record

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Abstract

Objectives: The rise in health care standardization has increased the focus on documentation, subsequently leading to the depersonalization of patient care. Humanistic Charting attempts to enhance person-centered care (PCC) by streamlining the integration of a patient's narrative into the electronic health record (EHR), while reducing a clinician's administrative workload. The Humanistic Charting Tool (HCT) transitions the collection and documentation of person-centric data to patients, empowering them to convey their values, preferences, and individuality.

Methods: We carried out a pilot study in an academic emergency department (ED) at the University of California, San Francisco, between February and April 2023, involving 6 clinicians and 29 adult patients using the HCT. Clinicians reviewed HCT entries prior to patient encounters. The feasibility and impact of HCT were assessed using surveys and interviews pre- and postuse. The statistical significance of patient and clinician responses was assessed with 2-sided paired t tests.

Results: The HCT was met with high patient satisfaction, with notable improvements in patient-rated care experience metrics post-HCT implementation, such as respect for patient preferences and clinician availability. The HCT received excellent Net Promoter Scores from both patients (52) and clinicians (83). Clinicians observed that the HCT promoted a humanistic care approach and helped alleviate burnout.

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Abstract (continued)

Conclusions: In this pilot study, the HCT has demonstrated encouraging feasibility and promise in helping enhance PCC within the challenging ED environment. Clinicians have noted its advantages in providing deeper insights into patient histories and improving the quality of interactions, having the potential to aid in counteracting biases. This pilot study demonstrates the HCT's potential to help foster humanism and PCC in emergency settings and supports the potential for broader applicability in health care systems.

Keywords: *humanistic charting tool, emergency department, patient care experience, clinician well-being, patient–physician connection, person-centered care, health record*

1 | INTRODUCTION

1.1 | Background

Electronic health records (EHRs) have brought standardization to the forefront of health care, streamlining workflows, improving the efficiency of health services, and standardizing clinical practices. However, this shift toward standardization with a focus on documentation and compliance often leads to depersonalization of patient care, redirecting health care professionals to be guided by system requirements while leaving little room to incorporate individual patient realities into the care process.[1–3] This depersonalization can hinder the development of complex therapeutic relationships, patient satisfaction, and the creation of tailored care plans that are crucial for improving care. This underscores the critical need for approaches that integrate person-centered care (PCC) and patient individuality back into health care processes.

1.2 | Importance

Clinical decision support systems have demonstrated significant improvements in emergency care decision-making by effectively integrating and presenting complex patient data to aid clinicians.[4] Research such as the study by Tiase et al[5] (2020) highlights improved treatment outcomes after integrating patient-provided data into EHRs.[6] Similarly, work by Demiris et al[7] (2019) underscores the importance of advanced tools in aiding clinicians to make more informed decisions.

However, most health care innovations aimed at enhancing PCC focus on modifying clinician behaviors, a time-consuming process that is implemented inconsistently.[6,8] For example, a clinician can be taught how to ask open-ended questions but can do little without additional time to listen to patients' responses. The Humanistic Charting Tool (HCT) strives to harmonize the need for system efficiency with the equally vital need for individualized care. The HCT collects data about a patient's "person"—their values, preferences, and life circumstances—and provides a standardized document that can be integrated into the EHR. Through the HCT, patients are empowered to directly input their own health narrative and efficiently incorporate their individuality into existing workflows.

1.3 | Goals of This Investigation

This pilot study at the University of California San Francisco (UCSF) Parnassus Emergency Department (ED) is designed to assess the feasibility and impact of the HCT. Our primary objectives include the following:

- Evaluate the effectiveness of the HCT in improving patient experiences and clinician satisfaction.
- Assess HCT's practicality through clinician feedback and identify enhancements for better integration into clinical workflows.

By helping bridge the gap between standardized systems and the principles of PCC, the HCT aims to standardize the individual patient's perspective within the health care process, thereby enhancing the health care experience.

2 | METHODS

2.1 | Study Design and Setting

Our feasibility pilot was conducted at the UCSF ED and featured a mixed-method analysis of patient and clinician experiences with the HCT. Ethics approval was granted by the UCSF institutional review board (IRB #22-37455).

2.2 | Selection of Participants

The study included attending physicians and nurse practitioners at the UCSF ED. Participation was voluntary, with participation invitations extended to all clinicians assigned to the lower acuity zone of the ED from February to April 2023. This selection method was based on operational criteria and clinician availability. Patients eligible for this study were those over the age of 18 who presented to the UCSF ED and were triaged to a lower acuity area. Written informed consent was obtained from all participants.

2.3 | Development and Background of the HCT

The HCT is an online questionnaire originally developed by the New York City Health and Hospitals System in response to the growing need for improving PCC approaches in health care. The development of the HCT involved extensive

The Bottom Line

The Humanistic Charting Tool offers a promising method for integrating patient-contributed data into electronic health records, enhancing personalized care in emergency settings. Our pilot at the University of California San Francisco Emergency Department demonstrated notable improvements in care experience metrics, reflecting enhanced patient satisfaction and clinician engagement. Although the Net Promoter Scores—52 for patients and 83 for clinicians—suggest a willingness to recommend the tool, the primary value lies in its potential to enrich the patient-clinician interaction and improve care quality. This study indicates that the Humanistic Charting Tool could play a significant role in advancing more individualized and person-centered emergency care.

collaboration between interdisciplinary teams made up of clinicians, patient engagement specialists, community members, and patients. The HCT comprises 8 sections that ask closed and open-ended questions about a patient's values, preferences, and life circumstances, which are not typically found in a patient's EHR (Supplementary Appendix 1). Once filled out by the patient, the data are mapped onto a standardized, condensed document by the tool's algorithms (Supplementary Appendix 2). A copy of the HCT is publicly accessible at https://innovations.nychhc.org/HumanisticCharting/Home/Form.

2.4 Implementation of the HCT

Between February and April 2023, the HCT was administered to consenting patients by medical student researchers. The process involved the patients filling out the HCT on tablets while waiting for their clinical consultation. This was purposefully designed to maximize the use of wait times. The condensed document featuring the patient's responses was given to the clinician prior to the initial patient encounter. The use of this document by the clinician during their patient interactions was not regulated. The intervention was deemed complete if the patient answered the required components of

the questionnaire and the clinician reviewed the document before their initial interaction with the patient.

2.5 Data Collection

After completing the HCT, patients completed a precare survey capturing their initial perceptions of the tool and their recent health care experiences. After their care visit, they completed a postcare survey to assess their experience in this encounter with HCT available to the clinician. Each patient was assigned a unique identifier to deidentify and link their survey responses.

Clinicians completed a post-shift survey at the end of their shift and participated in semistructured interviews within 4 weeks of using the HCT. These interviews were audio-recorded and transcribed verbatim.

2.6 Analysis

Our pilot aimed to assess the impact of the HCT on patient experiences and clinical perspectives when this information is available in the care process. We used several analytical techniques:

- Quantitative analysis: Two-sided paired t tests were used to determine the statistical significance of absolute paired differences in pre- and postintervention surveys.
- Qualitative analysis: Thematic analysis was conducted using a codebook developed by 2 authors (CM and ER/NG), who coded clinician interviews on Delve software, identifying emergent themes and relevant quotations. Although we conducted 6 interviews, formal saturation could not be reached due to the limited number of participants. The results shown highlight the consistent themes demonstrated throughout the interviews.
- Net promoter score (NPS): This score, ranging from -100 to 100, measures the likelihood of patients and clinicians recommending the HCT based on its perceived value and effectiveness in health care practice. This score, calculated using an industry-standard online NPS Calculator, is a widely recognized customer satisfaction benchmark that gauges overall satisfaction with a product or service and the customer's willingness to recommend it to others.[9,10]

3 RESULTS

3.1 Characteristics of Study Subjects

In total, 6 clinicians and 29 patients were included in this pilot study of the HCT. The demographics of the participants can be found in Supplementary Appendix 3.

3.2 Patient Perspectives on the HCT

Patient feedback indicated that 52% felt their doctors did not already know most of the information collected in the HCT. In addition, 93% of patients agreed with the importance of their health care team having access to the information

provided on the HCT, 97% found the HCT understandable and easy to fill out, and 86% reported that they would continue using and updating the tool in the future (Fig. 1[11]). A majority of patients expressed a favorable intention to recommend the tool to others, resulting in a NPS of 52, which indicates an excellent endorsement of the tool.

3.3 Clinician Perspectives on the HCT

Clinicians' feedback emphasized the tool's utility and impact on clinical practice. Although 5 of 6 clinicians reported utilizing the collected information during patient visits, all clinicians found the information collected through the tool to be informative and helpful for patient visits and expressed a desire to have access to this information for future patient visits (Table 1). The NPS for clinicians recommending this tool to other clinicians is 83.

3.4 Patient Care Experience Metrics

Figure 2 highlights patient perspectives of their past health care experiences compared to their care experience when using the HCT. The statistical analysis via 2-sided paired t tests of the survey data showed significant improvement in all facets of patient experience assessed and in overall patient satisfaction. This includes a noted improvement in patients' perceptions of their health care clinicians' respect for their individual preferences, clinician time availability, and an awareness of their personal life details beyond their medical information.

3.5 Qualitative Insights from Clinician Interviews

Thematic analysis of clinician interviews revealed detailed insights into the HCT's impact, Table 2 illustrates representative quotes from each of these main themes:

1. Impact on patient experience: Clinicians noted an improvement in patient engagement and satisfaction, attributing this to the deeper, more informed interactions prompted by the HCT.
2. Impact on clinician experience: Several clinicians commented that using the HCT improved their own well-being, reporting a sense of job satisfaction, reconnecting them with their primary caregiving motivations.
3. Impact on patient care: All clinicians noted that the HCT improved their ability to deliver care and communicate with patients about care plans. Some stated that the tool helped them mitigate possible unknown biases toward patients. Others observed that using the tool made it easier to discuss more individualized interventions that incorporate the patients' goals and barriers.
4. Areas for improvement: Clinicians suggested further refinements of the HCT, particularly advocating for the tool to be streamlined to better accommodate the fast-paced nature of ED operations. This feedback is compiled in Table 2, which includes direct quotes and suggestions for tool optimization to enhance usability and efficiency.
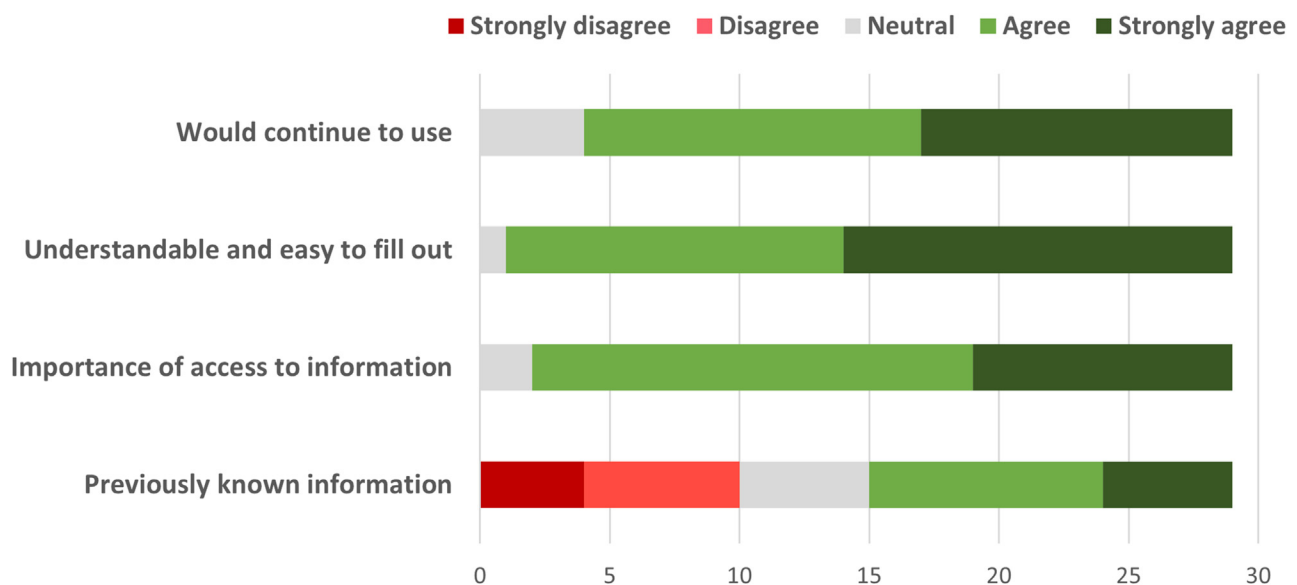

FIGURE 1. Patient responses to feedback survey (n = 29). Would continue to use: This tool is something I would continue to use and keep up to date. Understandable and easy to fill out: I find the Humanistic Charting tool understandable and easy to fill out. Importance of access to information: I find it important for my health care team to have access to the information I provided. Previously known information: I think doctors already know most of the information collected in the Humanistic Charting Questionnaire.[11]

TABLE 1. Clinician responses to feedback survey (n = 6).

	Question	Agree # (%)	Strongly Agree # (%)	Average	SD
1	The information collected through the tool informed me about things I did not know about my patient.	2 (33.3)	4 (66.7)	4.67	0.21
2	The information collected through the tool was helpful for the patient visit.	4 (66.7)	2 (33.3)	4.33	0.21
3	I would like to have access to this information for the care I provide to patients in the future.	3 (50)	3 (50)	4.5	0.22
4	I used information collected through the tool in my patient visit.	3 (50)	2 (33.3)	4.17	0.31

4 LIMITATIONS

In launching this initial pilot study of a novel tool, we acknowledge several limitations that impact the interpretation of its results. Notably, the study exhibits selection bias by only including participants who were willing and able to use the HCT, reducing generalizability. Completed at 1 site with a small cohort of participants, the applicability of these findings
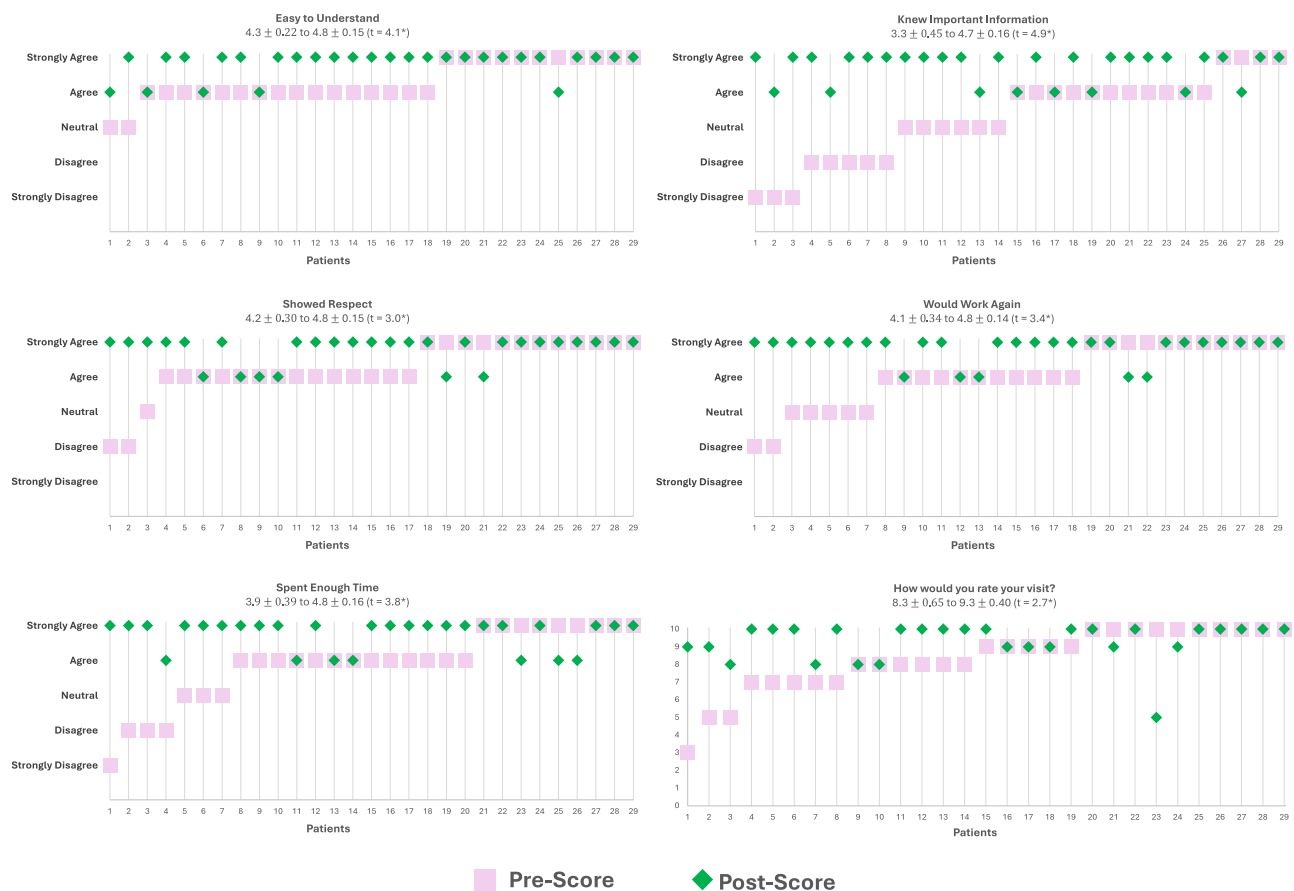

FIGURE 2. Comparative analysis of patient experiences pre- and posthealth care intervention (sample size: n = 29). This figure illustrates patient responses to a series of care experience metrics before and after use of the Humanistic Charting Tool. Responses reordered based on ascending preintervention scores to better visualize improvement trends, which are linked to postintervention outcomes. [Color] squares denote preintervention responses, whereas [Color] diamonds indicate postintervention responses. Mean ± CI (t score = #*); * denotes clinical significance of $P < .05$. Easy to understand: During this visit my clinician/doctor explained things in a way that was easy to understand. Showed respect: During this visit my clinician/doctor showed respect for what I had to say. Spent enough time: During this visit my clinician/doctor spent enough time with me. Knew important information: During this visit my clinician/doctor knew important information about my life other than medical information. Would work again: I would really like to work with the clinician whom I saw at this visit/appointment. Three investigators (CM, NG, and ER) examined and analyzed the data presented above.

TABLE 2. Interview themes from clinicians after using the HCT with selected illustrative quotations (n = 6).

Patient experience	
33-year-old male, training graduation year 2021	"Every patient that I went to see after they completed the tool was already in …a better mood than they probably would have been, which I think…[is] an added benefit… But just having someone go in and ask [about] those things, just shows the patient that we care, and so that already can improve the patient experience, which was awesome."
49-year-old female, training graduation year 2005	"For me, knowing some details about…a person's life, that I wouldn't have maybe thought to ask them about, felt like I could have a different rapport with them right away. And… there might be things that come up, related to [things like] discharge planning that …might change what you consider."
Clinician experience	
49-year-old female, training graduation year 2005	"It humanized the way I saw patients… Everyone in healthcare is burned out and this is a nice way to remind a person why we like medicine…by humanizing [patients]."
43-year-old female, training graduation year 2006	"For me, personally, I…found [taking care of patients] to be more enjoyable on a personal level, because sometimes when you're seeing many patients it can get a little tiresome when you're just moving from one individual to another. [Just] knowing a little bit about that individual… invigorates me."
Impact on patient care	
49-year-old female, training graduation year 2005	"I think it's important to have [access to information in the HCT], and I don't think we have access to most of it. Sometimes [similar information will] be in a social worker note if you try if you take the time to read them, but I would say generally, a lot of [the information in the HCT] we don't have."
43-year-old female, training graduation year 2006	"I also think that there's a lot of inherent bias in medicine and the way we treat patients. And I think [the HCT] really helps mitigate that bias, because you're essentially getting to know somebody [and figuring out what's important to them], even if it's just for a couple of minutes."
Areas for Improvement	
33-year-old male, training graduation year 2021	"Some patients came in, and then they spent a little bit of time explaining 'this is what I'm really looking for in this ED visit'. And it was something that I just couldn't provide because it's the emergency department, because we're resource limited, because we need the rooms [to] keep seeing other patients. And when [patients] didn't have those things addressed that they've spent extra time telling someone that they really wanted to have addressed, it can lead to a lot of frustration."

to other settings is restricted. Furthermore, the variability of clinicians' utilization of the tool could lead to inconsistencies impacting the data's reliability. Lastly, the reliance on short-term, self-reported measures can lead to response bias. Future studies will be designed to involve larger participant numbers, include controlled conditions, and address technological barriers to enhance the tool's evaluation.

5 DISCUSSION

An optimal health care interaction allows a clinician ample time to build rapport and trust, gathering all pertinent patient information. However, the current system's emphasis on standardization and efficiency often precludes this ideal scenario, compromising the depth and quality of patient-clinician interactions. The HCT aims to bridge this gap by providing an accessible and structured approach to garnering insights into patients' preferences and needs, which is invaluable in the high-stakes, time-sensitive ED environment.

In this mixed-methods pilot, the HCT was employed within the ED to explore its feasibility and impact. The results demonstrated that patient satisfaction and care experience improved across all metrics tested in the study. Patients reported a significant boost in their understanding of medical explanations, felt that they were heard and valued, and perceived that clinicians were well-versed in their personal lives. These outcomes suggest a promising intervention toward incorporating PCC.

Clinicians reported various benefits from using the HCT. With an NPS of 83, clinicians indicated a very high likelihood of recommending this tool to a colleague. Qualitative responses highlighted the impacts on job satisfaction and burnout mitigation and underscored the tool's immediate value in enhancing patient-clinician interactions by providing a novel depth of understanding. Many even underscored the HCT's role in enriching clinician's perspective, which could contribute to a more informed and empathetic health care practice.

These results indicate the HCT's potential to enhance meaningful patient-clinician relationships from the very first encounter. Although traditional care processes often relegate the development of trust and deeper understanding to a framework requiring multiple encounters, the HCT leverages patient-provided data to support the formation of these connections from the first encounter. This study also underscores the importance of empowering patients to share facets of their lives beyond medical information. By enabling patients to voluntarily provide detailed narratives about barriers, goals, and preferences for staying healthy, the HCT enriches the information available to clinicians and facilitates a more personalized care experience without adding to the clinical workload.

The concept of humanistic charting is not exclusive to the ED; it is designed to be integrated into the patient's longitudinal EHR, ensuring accessibility across all care settings and for every health care worker who interacts with the patient. The ED was chosen for this pilot study because it represents one of the most time-constrained and challenging environments for fostering meaningful patient-clinician connections, making it an ideal setting to test the tool's feasibility and impact. Although patients are seen for immediate issues, patients are more likely to follow recommended treatment plans that align with their values and life circumstances.[12,13] This type of information is often less accessible to an emergency clinician who does not typically have a longitudinal relationship with patients and is constrained by patient volumes in the acute care setting. Clinician insights from this study help support the use of the HCT even in one-time encounters in the ED, as it can lead to a more personalized and achievable treatment plan.

Looking forward, it is imperative to expand the scope of this study to better understand the broader applicability and effectiveness of the HCT. In this pilot, the patient's narrative was deliberately presented to the clinician with their chart, however, its usability should be further tested with the HCT results formally integrated into the EHR system as the ultimate goal of humanistic charting. Moreover, future studies should strive to adopt more rigorous research methodologies, including the possibility of randomized controlled trials, to provide robust evidence of the tool's impact. By systematically addressing these areas, we can significantly improve the design and implementation of the HCT, thereby testing its effectiveness in supporting clinicians in delivering high-quality, personalized patient care.

This pilot study of the HCT in an ED signals an encouraging prospect for health care delivery, embodying the philosophy of humanism by honoring each patient's unique reality and values. The study highlights the HCT's potential role in narrowing the gap between clinical efficiency and compassionate care delivery, suggesting significant steps toward care that resonates with patients and clinicians on a personal level. The integration of tools like the HCT supports the delivery of care that acknowledges the full spectrum of patients' needs and experiences.

AUTHOR CONTRIBUTIONS

CONFLICT OF INTEREST

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SUPPLEMENTARY MATERIALS