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Presence: Physician and non-physician insights about the art of human connection in clinical encounters

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Keywords:	physician-patient relationships, QUALITATIVE RESEARCH, burnout, physician presence, PRIMARY CARE

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Manuscripts

Presence: Physician and non-physician insights about the art of human connection in clinical encounters

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Abstract

Objective: We sought to investigate the concept and practices of "clinician presence" through interviews to explore how physicians and professionals create connection, engage in interpersonal interaction, and build trust with individuals across different circumstances and contexts.

Design: In 2017, we conducted semi-structured interviews with primary care physicians and non-medical professionals (n=40) representing diverse fields including protective services, business, management, education, art/design/entertainment, and social services.

Setting: Physicians were recruited from community safety-net, academic medical center, and Veterans Affairs systems.

Participants: Participants were balanced in terms of gender (55% male, 45% female), and represented a diversity of race/ethnicities while skewing white/caucasian (60%).

Results: Qualitative analyses yielded a definition of presence as *a purposeful practice of awareness, focus, and attention with the intent to understand and connect with individuals/patients*. For both medical and non-medical professionals, creating presence requires managing and considering time and environmental factors; for physicians in particular, this includes managing and integrating technology. Listening was described as central to creating the state of being present. Within a clinic, presence might manifest as a physician listening without interrupting, focusing intentionally on the patient, taking brief re-centering breaks throughout a

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clinic day; and informing patients when attention must be redirected to administrative or technology demands.

Conclusions: Clinician presence involves learning to step back, pause, and be prepared to receive a patient's story. Building on strategies from physicians and non-medical professionals, clinician presence is best enacted through purposeful intention to connect, conscious navigation of time, and proactive management of technology and the environment in order to focus attention on the patient. Everyday practice or ritual supporting these strategies could support physician self-care as well as physician-patient connection.

Strengths and limitations of this study

- This study the first in our knowledge to directly address defining physician *presence*.
- A strength of this study is the novel incorporation of design principle methods. We examined the analogous context of other non-medical caring professions to better understand our object of interest, physician presence.
- Our dataset is modest for a quantitative study (n=40), but acceptable for a qualitative investigation. We did find thematic saturation and coherence with our 40 participants.

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Introduction

The practice of medicine today is challenging because of data-entry requirements, rapid patient turnover, and inadequate reimbursement. The demands of practicing medicine present many barriers to physicians' ability to deliver humanistic care and uphold the ideals of medicine. Patient experience suffers, and meanwhile the rates of physician burnout have reached alarming levels.[1] Interventions that facilitate clinician mindfulness and engagement, and allow physicians to be more "present" might make space for physicians to reconnect with the personal rewards of clinical practice, even if little else changes. The concept of "presence" incorporates practice-oriented insights from across clinical care and research—including provider burnout,[1] patient-physician communication,[2] and patient-centered care[3]—and diverse other fields, ranging from business to education. Although the term is commonly used, we sought to identify a universal definition for presence through interviews with primary care physicians and non-medical professionals from diverse fields in which human connection is central.

Methods

We conducted semi-structured interviews in 2017-18 with 40 medical and non-medical professionals in California. Team members trained in qualitative methods (CBJ, RS, DZ, and NS) interviewed 10 primary care and family physicians from 3 primary care clinics in an academic medical center, a Veterans Affairs facility, and a community safety-net clinic.

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Following a human-centered design approach (ie. analogous inspiration),[4] we used convenience sampling to interview 30 individuals representing a variety of non-medical professions from 11 of the 25 occupation groups listed by the US Bureau of Labor Statistics (Table 1). We intentionally targeted professionals whose work involves fostering effective connections with individuals, often under stressful circumstances, and excluded professions in other areas. Overall, participants were balanced in terms of gender (55% male, 45% female), and represented a diversity of race/ethnicities while skewing white/Caucasian (60%) (Table 2). Ethical approval was granted for this study by the Stanford IRB, protocol 42397; October 26, 2017.

Interviews explored the concept of "presence" with questions about creating connection, being more present, building trust, adjusting strategies for different people, and navigating the environment during interactions with clients and patients. All interviews were recorded and transcribed, and we used the constant comparative method to code transcripts, meeting frequently as a team to discuss and workshop qualitative themes.[5] Interview excerpts relevant to presence were independently analyzed by two qualitative researchers (AM – PhD in Anthropology; CBJ – PhD in Linguistics) to generate core elements of presence. These elements were iteratively refined into a framework and working definition of presence through team discussions and research meetings. This resulted in: 1) a shared definition of presence; 2) a framework with several major themes supporting this definition; and 3) identification of cross-professional strategies for attaining presence.

Patient and Public Involvement

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Limited public involvement in the design and analysis of this research was elicited via research-in-progress presentations to the Presence Center at Stanford University School of Medicine. Including non-medical participants in our study effectively obtains a public perspective on the definition of clinician presence. Patient input was not directly requested.

Results

Qualitative analyses yielded a definition for presence as, *a purposeful practice of awareness, focus, and attention with the intent to understand and connect with individuals/patients*. Our framework focused on activities involved in creating presence: intentional connection, being aware of time, and managing the physical environment (Table 3).

Presence requires purposeful intention to connect.

Several interviewees noted that connection is created through "attention," "focus," and "listening just to understand." One physician described presence as "intense connected moment[s]" during the clinical interview, where "[you are] trying to understand [a patient's] level of suffering [and] the significance of their story." An EPA enforcement agent stated that connection is "the goal of presence"; a chaplain defined presence as a state of "[not being] alone to each other." Presence was also described as the absence or opposite of distraction. A journalist reflected that not paying attention could indicate "this person is not really interested…in me."

Interviewees described removing distractions and being prepared as key strategies to achieving purposeful intention. Some mentioned removing both literal and figurative distractions. A

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restorative justice lawyer described a personal ritual of brushing off external or intruding thoughts and feelings between encounters to be more present, and repeating: "Now. Here. This." Several physicians described the value of arriving early to review charts and plan, in order to enter into visits feeling prepared.

Presence requires conscious navigation of time.

Presence was described as something temporal and tangible, happening during a specific time, and requiring protective boundaries. Time was referenced repeatedly, e.g. "taking a minute to notice" (health promoter). Echoing its root in the word "present," presence was defined as not thinking ahead but instead returning to the present and being aware "in real time."

Strategies related to presence and time included prioritizing brief quiet time for reflective "re-centering" breaks that physicians and professionals mentioned needing between patients/clients. A physician also suggested "not filling every moment" of the day with technological distractions to allow more time for presence.

Presence requires awareness of the physical environment.

Presence was described in terms of its physical qualities. This included concrete factors such as positioning and spacing ("being physically there"), and also more abstract physical sensations e.g., "you feel it when the temperature changes in the room". All interviewees described the pull of competing priorities, with physicians particularly highlighting the challenge that administrative-demands and the electronic medical record pose for presence, particularly because

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some providers express that it is "rude for somebody to look at a screen and not look at the person in front of them." Participants (physician, recreational therapist, design researcher, health promotor) often equated presence with space, as in "holding space," or "letting enough space in."

Strategies related to presence and space emphasized that, as with other physical spaces, presence requires boundaries. Participants created presence by determining who would be in the room and setting boundaries for how much personal information to share. To combat the distancing effects of technology, physicians described putting away phones during clinic visits and avoiding email. In addition, some physicians discussed strategies that preserved connection with patients during technology use: "presence is also letting them know… [you're] looking something up [in the medical record]."

Discussion

In this study of physicians and non-medical professionals whose jobs involve human connection, we found that presence is a universal concept that involves intentionality, focus, and attention to time and the physical environment.

A growing body of work has explored presence in the context of healthcare system/intervention design,[6–9] and has focused on clinical conditions, actions or training to make presence possible. To our knowledge, however, this is the first study to systematically generate a definition for presence, which may help guide research and interventions that leverage insights from within and outside the field of medicine.

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The features of presence lend themselves to avenues for further exploration. Presence involves learning to step back, pause, suspend expectations, and receive and connect with someone's story. Listening was described as central to creating a state of focused attention. Physicians interrupt their patients early and often[10]-- an emphasis on listening as a prerequisite for presence opens conceptual and curricular space for teaching not only how to communicate, but when to stay silent. Presence lies at the juncture of interactions within clinical spaces; like many respondents describe, it hangs in the air, is felt as a physical quality, or emanates between two people whose goals are aligned.

Similarly, because presence is influenced by environmental factors for many professionals, teaching physicians to think about context (intention, time, physical environment, and routine) may help preserve and channel connections. Presence may be enhanced through strategies that facilitate focused attention on the patient (e.g., decreasing the intrusiveness of the electronic medical record, providing time for emotional/focus recovery between clinical encounters, and encouraging self-care to protect both physical and emotional boundaries).

This study the first in our knowledge to directly address defining physician *presence*. We also find that our study is strengthened by incorporating non-physician perspectives, following the design principle of examining analogous contexts – here other caring professions – to better understand our object of interest, physician presence. We are limited by a modest dataset, but did find thematic saturation and coherence with our 40 participants. Furthermore, another study could have performed a full review of presence in other domains, but we chose to focus just on presence with clients/patients to keep our research focused and targeted.

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Human connection is central to clinical care. While challenging to cultivate, this connection offers some of the greatest rewards to practicing physicians. Intentional practices that foster presence may make physicians more receptive to patient stories and facilitate meaningful exchanges that are critical to accurate diagnosis, clinical decision-making, and therapeutic interactions for both patients and physicians.

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Previous presentations: None.

Authors' contributions

CBJ was involved in data collection and analysis. She also was the primary author of the manuscript.

RS was involved in data collection and analysis. She also was a major contributor to writing the manuscript.

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AM was involved in data collection and analysis. She also was primary contributor to the manuscript.

MCH was involved in data collection and analysis. She also contributed significant edits to the manuscript.

AT was involved in data collection and analysis. He also contributed significant edits to the manuscript.

JGS was involved in research design and also contributed significant edits to the manuscript.

DZ was involved in data collection and analysis. She also contributed significant edits to the manuscript.

NS was involved in data collection and analysis. She also contributed significant edits to the manuscript.

ST was involved in research design and also contributed significant edits to the manuscript.

AV was involved in research design and also contributed significant edits to the manuscript.

DZ was involved in research design and data collection, and also contributed significant edits to the manuscript.

All authors read and approved the final manuscript.

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Table 1. Professionals Fields from the Bureau of Labor Statistics and Occupations of Non-Medical Interviewees

Professional field/Occupation groups	Occupations
Management	Hospice program director
	Restaurateur
	Middle school principal
	CEO of a technology company
	Software company director
Business & Financial/ Sales	Television sales and marketing
	Startup sales
	Specialty beverage importer
	Realtor
Community & Social Service	Chaplain
	Licensed clinical social worker (LCSW)
	Health promoter
Education, Training & Library	Teacher
	Music instructor
	High school health educator
	Psychology Professor
	Special education educator
Arts & Design/ Entertainment & Sports/ Media & Communications	Documentary filmmaker

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	Design researcher
	Professional musician
	Creative designer
	Journalist
Legal / Protective Service	Firefighter/EMT (Chief)
	Restorative justice lawyer
	Police officer
	EPA enforcement agent
Personal Care and Service	Yoga instructor
	Hospice volunteer
	Recreational therapist
	Massage therapist

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Table 2. Characteristics of participants

Characteristic	n	Percentage of sample
Gender		
Male	22	55%
Female	18	45%
Race/Ethnicity		
White/Caucasian	24	60%
Asian and southeast asian	9	22.5%
Latino/a	3	7.5%
Middle Eastern	2	5%
Pacific Islander	1	2.5%
African American	1	2.5%
Age (years)		
20-29	4	10%
30-39	13	32.5%
40-49	10	25%
50-59	13	32.5%

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Table 3. Comparative exemplar quotes from a national convenience sample of physicians and non-medical professionals about themes related to presence (n=40, interviews conducted in 2017-18)

Theme	Physicians	Non-Medical Professionals
Purposeful Intention to Connect		
Intention to connect	You want to open [communication]... You want to have people feel freedom that they can talk to you about personal things. [MD1]	I think that's the goal of presence… to obtain a connection, but you may or may not get it. [EPA enforcement agent]
Attention	I think just really being there, and being already listening to them, ...So, I don't look at the computer. I just really try to look at them. [MD1]	I like attending better than presence because it suggests that there's a relationship. [LCSW]
Focus	I guess it's just a complete focus on the patient at that time and at that moment, and really trying to give your undivided attention to that. [MD3]	Staying focused on the moment, looking somebody in the eye, listening and responding to them. [Journalist]
Listening	I think I've learned to just sit and listen and be present for when patients share their story about what's going on with them, and what's of interest to them, and really just giving them the space to talk about that and overcoming the urge to interrupt or direct the conversation. [MD8]	Staying focused on the moment, looking somebody in the eye, listening and responding to them. ...one of the most difficult parts of interviewing somebody is truly listening... So, being present is truly listening. [Journalist]
Focusing on the client/patient story	The interview often with me is… that really intense connected moment where I'm really trying to understand their level of suffering, what this means to them, the significance of their story and how that impacts their life. [MD2]	Most of the times it's about hearing someone's story and about why they did something, and where it led them, and who they are now. And so those experiences change me often ...because I was present for [the story]. [Documentary filmmaker]
Not being alone	...so [a patient] didn't feel like she was completely alone in that, I assessed that the best way to make her feel safe was for me to disclose my vulnerability as well. [MD2]	We haven't been alone to each other, we haven't been alone to what's greater than ourselves. [Chaplain]

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Removing distractions	Well, so I kind of say that your baggage is packed. So it isn't spilling into the office visit or the phone call or whatever it is. [MD7]	It means kind of the opposite of distraction. It's kind of focus on your conversation and interaction with a person in real time and having a true sense of focus on it. [EPA enforcement agent]
Conscious Navigation of Time		
Returning to the present	It is almost like a meditation where we're taught to focus on our breathing and focus, but naturally our mind wanders, and you want to check that email. [MD3]	... the executive director of our organization who's a Jesuit priest, he always uses this mantra where he says, "Now. Here. This," to stay present. And so when I remember to do that, it has been helpful. [Restorative justice lawyer]
Taking breaks	I take breaks, actually. I think that's been a big thing. I am no longer interested and I'm no longer capable, because of that, of this way of working where you're constantly doing something. [MD5]	Yeah, get a good sleep, making sure that [I've] eaten, making sure there's breaks, and that I have stuff with me to keep my energy going, like [chocolate] and water and stuff, whatever I need that day. [Documentary filmmaker]
Quiet/ silence / slowing down	I'm not in as much of a rush to get to the right answer. I'm more comfortable with the silence, with the space, with the level of certainty that comes with primary care, and understanding that I don't have to have the answer right this instant. [MD8]	I think silence is a big part of presence, and I think just taking a minute to notice, to get where the person is from, really how are you today. [Psychology professor]
Management of the Physical Environment		
Occupying the same space as a client/patient	I certainly pull the chair up close to talk to people trying to find that right distance, not too close, but certainly not across the room. Just trying to be in that space with the patient. [MD1]	Presence is a felt sense that I have of ... being seated inside myself in my body and being present in the room, sitting in the room and aware of everything that's in the room. [LCSW]
Setting boundaries	I'll be very persistent [about staying on topic]. Like, 'Uh, no, we're not going there. We're staying here.' That's ...related to boundary setting ...trying to control things so that there can be connection, so that something can happen, so that there's time to actually engage...[MD5]	...Setting boundaries… [is] I hear you say ... 'heres what I'm going to do and here's what you're going to do. Is that okay with you?' Asking permission. [Recreational therapist]

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Technology/ managing competing priorities	And so, maybe part of presence is also letting them know, okay, I'm looking at the ER visit, because you're telling me about that. [MD3]	So you close the laptop and you get away from the table and you don't look at your notes and you connect. [Psychology professor]

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Reporting checklist for qualitative study.

Based on the SRQR guidelines.

Instructions to authors

Complete this checklist by entering the page numbers from your manuscript where readers will find each of the items listed below.

Your article may not currently address all the items on the checklist. Please modify your text to include the missing information. If you are certain that an item does not apply, please write "n/a" and provide a short explanation.

Upload your completed checklist as an extra file when you submit to a journal.

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O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med. 2014;89(9):1245-1251.

		Reporting Item	Page Number
	#1	Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g. ethnography, grounded theory) or data collection methods (e.g. interview, focus group) is recommended	1
	#2	Summary of the key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results and conclusions	4-5
Problem formulation	#3	Description and signifcance of the problem / phenomenon studied: review of relevant theory and empirical work; problem statement	6
Purpose or research question	#4	Purpose of the study and specific objectives or questions	6
Qualitative approach and research paradigm	#5	Qualitative approach (e.g. ethnography, grounded theory, case study, phenomenolgy, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g. postpositivist, constructivist / interpretivist) is also	6-7

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		recommended; rationale. The rationale should briefly discuss the justification for choosing that theory, approach, method or technique rather than other options available; the assumptions and limitations implicit in those choices and how those choices influence study conclusions and transferability. As appropriate the rationale for several items might be discussed together.	
Researcher characteristics and reflexivity	#6	Researchers' characteristics that may influence the research, including personal attributes, qualifications / experience, relationship with participants, assumptions and / or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results and / or transferability	7
Context	#7	Setting / site and salient contextual factors; rationale	6
Sampling strategy	#8	How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g. sampling saturation); rationale	6
Ethical issues pertaining to human subjects	#9	Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	7
Data collection methods	#10	Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources / methods, and modification of procedures in response to evolving study findings; rationale	7
Data collection instruments and technologies	#11	Description of instruments (e.g. interview guides, questionnaires) and devices (e.g. audio recorders) used for data collection; if / how the instruments(s) changed over the course of the study	7
Units of study	#12	Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	7
Data processing	#13	Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymisation / deidentification of excerpts	7

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Data analysis	#14	Process by which inferences, themes, etc. were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale	7
Techniques to enhance trustworthiness	#15	Techniques to enhance trustworthiness and credibility of data analysis (e.g. member checking, audit trail, triangulation); rationale	7
Syntheses and interpretation	#16	Main findings (e.g. interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	8-9
Links to empirical data	#17	Evidence (e.g. quotes, field notes, text excerpts, photographs) to substantiate analytic findings	See note 1
Intergration with prior work, implications, transferability and contribution(s) to the field	#18	Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application / generalizability; identification of unique contributions(s) to scholarship in a discipline or field	10
Limitations	#19	Trustworthiness and limitations of findings	11
Conflicts of interest	#20	Potential sources of influence of perceived influence on study conduct and conclusions; how these were managed	12
Funding	#21	Sources of funding and other support; role of funders in data collection, interpretation and reporting	12

Author notes

1. 8-9, Table 3

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What is Clinician Presence? A qualitative interview study comparing physician and non-physician insights about practices of human connection

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What is Clinician Presence? A qualitative interview study comparing physician and non-physician insights about practices of human connection

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Abstract

Objective: We sought to investigate the concept and practices of "clinician presence," exploring how physicians and professionals create connection, engage in interpersonal interaction, and build trust with individuals across different circumstances and contexts.

Design: In 2017-18, we conducted qualitative semi-structured interviews with 10 physicians and 30 non-medical professionals from the fields of protective services, business, management, education, art/design/entertainment, social services, and legal/personal services.

Setting: Physicians were recruited from primary care clinics in an academic medical center, a Veterans Affairs clinic, and a federally-qualified health center.

Participants: Participants were 55% male and 45% female; 40% were non-white.

Results: Qualitative analyses yielded a definition of presence as *a purposeful practice of awareness, focus, and attention with the intent to understand and connect with individuals/patients*. For both medical and non-medical professionals, creating presence requires managing and considering time and environmental factors; for physicians in particular, this includes managing and integrating technology. Listening was described as central to creating the state of being present. Within a clinic, presence might manifest as a physician listening without interrupting, focusing intentionally on the patient, taking brief re-centering breaks throughout a clinic day; and informing patients when attention must be redirected to administrative or technological demands.

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Conclusions: Clinician presence involves learning to step back, pause, and be prepared to receive a patient's story. Building on strategies from physicians and non-medical professionals, clinician presence is best enacted through purposeful intention to connect, conscious navigation of time, and proactive management of technology and the environment in order to focus attention on the patient. Everyday practice or ritual supporting these strategies could support physician self-care as well as physician-patient connection.

Strengths and limitations of this study

- Strengths of this study include its novelty; this is the first study to use human-centered design principles and methods to systematically define clinician *presence*.
- This study uses interviews with physicians and non-physician intentionally to broaden potential options and strategies for creating presence with patients beyond those typically considered in strictly medical settings.
- Limitations included a modest dataset (n=40), which is acceptable for a qualitative investigation, and which adequately addressed thematic saturation and coherence.

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Introduction

The practice of medicine today is challenging for a number of reasons, including data-entry requirements, rapid patient turnover, inadequate reimbursement, lack of administrative support, competing demands, litigious environment, and increased complexity of patients. The demands of practicing modern medicine present many barriers to physicians' ability to deliver humanistic, patient-centered care and uphold the ideals of medicine.[1]

Patient experience suffers in an overburdened healthcare system, and meanwhile the rates of physician burnout have reached alarming levels. Almost half of providers in the US show evidence of burnout.[2,3] Burnout is historically related to emotional exhaustion,[4] but for some clinicians may manifest as depersonalization and disengagement.[5]

While it is widely understood that system-level interventions are needed to address burnout, interventions that facilitate clinician engagement and mindfulness can also be helpful.[6] At the individual level, successfully being more "present" may make space for physicians to reconnect with the personal rewards of clinical practice, even if little else changes.

Working concepts of "presence" incorporate practice-oriented insights from across clinical care and research—including provider burnout,[2] patient-physician communication,[7] and patient-centered care[8]—and diverse other fields, ranging from business to education. However, there is little literature on "clinician presence." Other studies addressing this concept have been focused

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in niche areas such as psychology/psychotherapy,[9] palliative care,[10] or family and caregiver healthcare experience.[11] These few studies have presented clinician presence as a state of mindfulness,[9] "compassionate silence" originating from within a contemplative practice,[10] or a patient-provider "shared presence" that relies on engagement of both parties.[11]

Our research around defining presence seeks to outline the important elements of clinician presence, and to specifically decouple it from patient-provider communication, which is bi-directional. Clinician presence in our view can be enacted by physicians, with or without active patient reception. Although the term is commonly used, our research question centered on identifying a universal definition for clinician presence using qualitative data from interviews with primary care physicians and non-medical professionals from diverse fields in which human connection is central.

Methods

We conducted a qualitative study of semi-structured interviews in 2017-18 with physicians and non-medical professionals in California. Team members trained in qualitative methods (CBJ, RS, DLZ, and NS) interviewed 10 internal medicine and family medicine physicians practicing in 3 primary care clinics at an academic medical center, a Veterans Affairs facility, and a federally-qualified health center serving primarily Spanish-speaking immigrants. Interview recordings and transcripts were stored in PHI and HIPAA-compliant secure files, and were only available to research staff. Files were anonymous in the case of non-medical professionals, and de-identified for physicians, retaining only role and system indicators (eg. Provider1_System1).

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Considering the scale of barriers that medicine is facing, from rising costs to provider shortages, some have called for researchers and planners to look for solutions outside of medicine. One such approach is human-centered design, which leverages insights from stakeholders at every level of design practice, and has been specifically called for in terms of building resilience in medicine.[12] We employed a human-centered design approach that leveraged analogous inspiration, a strategy that has been used by engineers when there is little precedent: analogous domains must be examined as a starting point from which possible context-dependent solutions can be developed.[13] Since little has been systematically documented about clinician presence in medicine, we intentionally wanted to reach beyond medicine to gather insights from analogous domains. In general, human-centered design and analogous inspiration gives us the opportunity to learn for elegant solutions that may already exist, but have not yet been utilized in the medical setting.

We used convenience sampling to interview 30 individuals systematically representing a variety of non-medical professions from 11 of the 25 occupation groups listed by the US Bureau of Labor Statistics (Table 1). Using the concept of analogous inspiration, we intentionally targeted professionals whose work involves fostering effective connections with individuals, often under stressful circumstances. We used a convenience sampling technique to identify participants, and intentionally recruited from diverse fields to create a sample representative of the range of careers.

Overall, participants were balanced in terms of gender (55% male, 45% female), and represented a diversity of race/ethnicities while skewing white/Caucasian (60%) (Table 2). Ethical approval was granted for this study by the Stanford IRB, protocol 42397; October 26, 2017.

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Interviews explored the concept of "presence" with questions about creating connection, being more present, building trust, adjusting strategies for different people, and navigating the environment during interactions with clients and patients (see Table 3). All interviews were recorded and transcribed, and we used the constant comparative method to code transcripts, meeting frequently as a team to discuss and workshop qualitative themes.[14] Interview excerpts relevant to presence were independently analyzed by two qualitative researchers (AM – MD and PhD in Anthropology; CBJ – PhD in Linguistics) to generate core elements of presence. These elements were iteratively refined into a framework using inductive coding, which enabled us to define elements of presence as they emerged from the data. Since there was not an established definition of presence prior to this work, we did not have preset codes. We discussed the definition and coding as a full research team (12 individuals with backgrounds in medicine, implementation science, health services research, physician wellness, health communication, and linguistics) weekly over the course of a month. Detailed meeting notes were kept by two project managers, and we referred back to these meeting notes from session to session. To address biases, we debated discrepancies, but also recognized and listened to minority opinions. Research suggests that this kind of disagreement and welcoming of minority viewpoints results in better-quality coding and decision-making.[15] A working definition of presence, plus the major themes supporting this definition, were presented to our advisors and refined during discussions with the team and advisors. This resulted in: 1) a shared definition of presence; 2) a framework with several major themes supporting this definition; and 3) identification of cross-professional strategies for attaining presence. Data generated and analyzed as part of this research are not publicly posted due to potential opportunity to identify participants. However, data are available from the corresponding author on reasonable request. Protocols are also available upon request.

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Patient and Public Involvement

Limited public involvement in the design and analysis of this research was elicited via research-in-progress presentations to the Presence Center at Stanford University School of Medicine. Patient input was not directly requested.

Results

Qualitative analyses yielded a definition for clinician presence as, *a purposeful practice of awareness, focus, and attention with the intent to understand and connect with individuals/patients*. Our framework focused on activities involved in creating presence: intentional connection, being aware of time, and managing the physical environment (Table 4).

Presence requires purposeful intention to connect.

Several interviewees noted that connection is created through "attention," "focus," and "listening just to understand." One physician described presence as "intense connected moment[s]" during the clinical interview, where "[you are] trying to understand [a patient's] level of suffering [and] the significance of their story." An enforcement agent stated that connection is "the goal of presence"; a chaplain defined presence as a state of "[not being] alone to each other." Presence was also described as the absence or opposite of distraction. A journalist reflected that not paying attention could indicate "this person is not really interested…in me."

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Our definition of presence as "purposeful" practices intentionally includes both *deliberate* practices – practices that you intentionally choose to do – and also doing practices *for a purpose*, with the goal of achieving specific results. Deliberate practices and goals overlapped, informing our choice of the word "purposeful," and included: making an agenda "so we're clear" (physician); making a connection (high school health educator); determining how truthful people are being (enforcement agent); identifying skills and resources people need to get tasks done (software company director); listening to understand, not to develop a response (hospice volunteer); trying to empower patients (physician); supporting the feeling of making a difference (physician); and engendering trust through participant empowerment (documentary filmmaker). We see in our data that presence is central to the goals of patient care, including connecting and listening, and also to the care of the humanity of the provider, promoting resiliency for them through feeling that they make a difference.

Interviewees described removing distractions and being prepared as key strategies to achieving purposeful intention. Some mentioned removing both literal and figurative distractions. A restorative justice lawyer described a personal ritual of brushing off external or intruding thoughts and feelings between encounters to be more present, and repeating: "Now. Here. This." Several physicians described the value of arriving early to review charts and plan, in order to enter into visits feeling prepared.

Presence requires conscious navigation of time.

Presence was described as something temporal and tangible, happening during a specific time, and requiring protective boundaries. Time was referenced repeatedly, for example "taking a

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minute to notice" (health promoter). Echoing its root in the concept of being in the present, presence was defined as not thinking ahead but instead returning to the current moment. An enforcement agent also referenced presence as being aware "in real time."

Strategies related to presence and time included prioritizing brief quiet time for reflective "re-centering" breaks that physicians and professionals mentioned needing between patients/clients. A physician also suggested "not filling every moment" of the day with technological distractions to allow more time for presence. Some physicians bemoaned the lack of time for self-reflection: "I don't go home saying, 'That was a great day,' I go home saying, 'I've got all this other work to do.'" By contrast, a teacher valued the "bit of time to debrief" with colleagues as valuable because it helped them process and be ready for the next day.

Providers acknowledged that "time with the patient [is] the key…An offhand comment when you're talking about shoulder pain could lead you down to more chest pain." In addition to being able to use time to explore medical content, physicians reported needing more time "to keep track of the growing data set" generated by the electronic health record (EHR).

Presence requires awareness of the physical environment.

Presence was described in terms of its physical qualities. This included concrete factors such as positioning and spacing ("being physically there"), and also more abstract physical sensations: "you feel it when the temperature changes in the room." All interviewees described the pull of competing priorities, with physicians particularly highlighting the challenge that administrative-

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demands and the EHR pose for presence, particularly because some providers expressed that it is "rude for somebody to look at a screen and not look at the person in front of them."

Interviewees used space as a metaphor. In addition to referring to the literal physical environment, the use of "space" also referenced the emotional and relational environment. Discussion of space was both literal "the sound, the seats, the space, the rooms set up in a circle," and metaphorical "presence allows the space for the unknown and clinicians aren't comfortable with the unknown." Participants (physician, recreational therapist, design researcher, health promotor) often equated presence with space, as in "holding space," or "letting enough space in."

Strategies related to presence and space emphasized that, as with other physical spaces, presence requires boundaries. Participants created presence by determining who would be in the room and setting boundaries for how much personal information to share. To combat the distancing effects of technology, physicians described putting away phones during clinic visits and avoiding email. In addition, some physicians discussed strategies that preserved connection with patients during technology use: "presence is also letting them know… [you're] looking something up [in the health record]."

Physicians also utilized up-front expectation setting and help from team-members to support boundaries on time. For instance, physicians would communicate from the start of the visit with patients about boundaries of time, for example for the patient who arrived late: "[it's] gonna be a short visit." However, physicians were reluctant to interrupt patients on account of time, even if the visit was running over. In team-based practices, staff would also support boundaries around

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time by establishing visit length expectations during the rooming process, and knocking/entering the clinic room to communicate when a visit had gone too long.

Discussion

In this study of physicians and non-medical professionals whose jobs involve human connection, we found that presence is a universal concept that involves intentionality, focus, and attention to time and the physical environment. A growing body of work has explored presence in the context of healthcare system/intervention design,[16–19] and has focused on clinical conditions, actions, or training to make presence possible. To our knowledge, however, this is the first study to systematically generate a definition for presence, which may help guide research and interventions that leverage insights from within and outside the field of medicine.

Presence vis-a-vis connection, empathy, and mindfulness

Presence rightly overlaps with other core areas of patient-provider interactions, such as connection, empathy, and emotions (both those of the patient and the physician). Extensive work in the realm of relational communication can be leveraged to support presence and shed light on how clinician presence might be achieved, for instance by attending to patient stories, avoiding interruptions, using silence and reflective listening, setting agendas, and harnessing non-verbal communication skills such as eye contact and leaning in.

Furthermore, research in the interface between emotional awareness/empathy and presence could enrich both concepts. Empathy and emotional awareness exhibited by providers builds trust,[20]

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but the documented "emotional labor" of empathy in clinical care is substantial.[21] The support that physicians need both in managing responses to patient emotions and regulating their own emotional wellbeing could be addressed through clinician presence. Presence may consist of a set of behaviors, skills, and rituals allowing providers to better care for patients in distress. It may also support physicians in allowing for structured rituals, such as a few deep breaths before entering into patient rooms, that are known to support regulation of emotional experience by changing neurological and physical responses in the body.[22]

Defining clinical presence gives medicine the conceptual language to examine unexplored elements of patient-provider connection that not only enhance patient care, but also enrich provider experience of their role as healers. Today's technology-saturated clinic environment is driving demand for interventions that foster human connection; an intervention focused on presence is a natural next step to address human disconnection in busy clinics.

Our interest in presence is motivated by the need to synthesize approaches from connection, communication, and partnership in the context of the clinic visit. We are also driven by the conviction that while fundamentals of communication, emotional awareness, or even perfected clinic flow are indeed steps towards achieving better patient outcomes, there is more to healing than any individual practice in these domains. Our framework for presence may facilitate continued conversation about the role of physicians as scientists, detectives, empaths, and healers.

What could Presence look like?

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The features of presence lend themselves to specific practices that warrant further exploration, particularly in the areas of listening/silence, contextual awareness, and mindfulness. Presence involves learning to step back, pause, suspend expectations, and receive and connect with someone's story. Physicians interrupt their patients early and often[23]— an emphasis on listening as a prerequisite for presence opens conceptual and curricular space for teaching not only how to communicate, but when to stay silent.

Presence also lies at the juncture of interactions within clinical spaces; respondents described that it hangs in the air, is felt as a physical quality, or emanates between two people whose goals are aligned. Because presence is influenced by contextual factors for many professionals, teaching physicians to consider their physical environment could help preserve and channel connections. Specific approaches from the literature include sharing the screen so that the EHR is fully integrated into the visit, providing panel management support or scribe services, leveraging technical solutions to help support clinical decision-making, and maximizing the efficiency of the EHR.[24,25]

Looking ahead as the United States population ages, best practices for communication and connection will need to be expanded beyond the traditional patient-provider dyad. Exploring presence may help us address the integration of caregivers, friends, and family into clinic visits and relationships with providers. Finally, mindfulness may be an important component of presence in training and clinical interactions, where even very minimal levels of effort (<5 minutes daily) may demonstrate benefit.

Limitations

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Several limitations warrant discussion. First, study findings were derived from a small sample of physicians and non-medical professionals. Nevertheless, we found that we reached thematic saturation and coherence with 40 participants. Second, the study was limited to the perspective of primary care clinicians and other professionals. Future efforts should evaluate the impact of presence on patients, particularly since research has documented that physicians often overestimate their ability to communicate effectively.[26] In addition, the study's focus on individual practices to achieve presence has the potential to obscure the critical need for system-based interventions that address time pressure and technology intrusions. To be clear, while our findings suggest that presence is a central and important part of high-quality care that can support wellness for both patients and providers, the full onus of system change should not be placed on physicians. Misplacing the burden of responsibility solely on individual physicians without addressing system-level issues could in fact have unintended consequences of increasing expectations without adding support, which has been linked to increased burnout.[27]

Conclusion

In conclusion, human connection is central to clinical care; while challenging to cultivate, this connection offers some of the greatest rewards for practicing physicians. Insights from physicians and non-medical professionals suggest that clinician presence may be achieved through purposeful intention to connect, conscious navigation of time, and proactive management of technology and the environment in order to focus attention on the patient. Adopting intentional practices to support presence may make physicians more receptive to patient stories and facilitate meaningful exchanges that are critical to accurate diagnosis, clinical decision-making, and therapeutic interactions for both patients and physicians.

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Conflicts of Interest:

Dr. Cati Brown-Johnson reports grants from the Gordon and Betty Moore Foundation (#6382), during the conduct of the study.

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Authors' contributions

CBJ was involved in data collection and analysis. She also was the primary author of the manuscript.

RS was involved in data collection and analysis. She also was a major contributor to writing the manuscript.

AM was involved in data collection and analysis. She also was a primary contributor to the manuscript.

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MCH was involved in data collection and analysis. She also contributed significant edits to the manuscript.

AT was involved in data collection and analysis. He also contributed significant edits to the manuscript.

JGS was involved in research design, data collection and also contributed significant edits to the manuscript.

DLZ was involved in data collection and analysis. She also contributed significant edits to the manuscript.

NS was involved in data collection and analysis. She also contributed significant edits to the manuscript.

ST was involved in research design and also contributed significant edits to the manuscript.

AV was involved in research design and also contributed significant edits to the manuscript.

DMZ was involved in research design and data collection, and also contributed significant edits to the manuscript.

All authors read and approved the final manuscript.

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Data Availability:

Data generated and analyzed as part of this research are not publicly posted due to potential opportunity to identify participants. However, data are available from the corresponding author on reasonable request. Protocols are also available upon request.

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Table 1. Professionals Fields from the Bureau of Labor Statistics and Occupations of Non-Medical Interviewees

Professional field/Occupation groups	Occupations
Management	Hospice program director
	Restaurateur
	Middle school principal
	CEO of a technology company
	Software company director
Business & Financial/ Sales	Television sales and marketing
	Startup sales
	Specialty beverage importer
	Realtor
Community & Social Service	Chaplain
	Licensed clinical social worker (LCSW)
	Health promoter
Education, Training & Library	Teacher
	Music instructor
	High school health educator
	Psychology Professor
	Special education educator
Arts & Design/ Entertainment & Sports/ Media & Communications	Documentary filmmaker

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	Design researcher
	Professional musician
	Creative designer
	Journalist
Legal / Protective Service	Firefighter/EMT (Chief)
	Restorative justice lawyer
	Police officer
	EPA enforcement agent
Personal Care and Service	Yoga instructor
	Hospice volunteer
	Recreational therapist
	Massage therapist

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Table 2. Characteristics of participants (N=40)

Characteristic	n	Percentage of sample
Gender		
Male	22	55%
Female	18	45%
Race/Ethnicity		
White/Caucasian	24	60%
Asian and southeast Asian	9	23%
Latino/a	3	8%
Middle Eastern	2	5%
Pacific Islander	1	3%
African American	1	3%
Age (years)		
20-29	4	10%
30-39	13	33%
40-49	10	25%
50-59	13	33%

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Table 3. Questions for interview protocol

1. What do you enjoy most about what you do?
2. Can you tell me a bit about instances in your professional work where you need to make personal connections with individuals (e.g., patients, congregants, consumers, trainees, clients)?
3. What do you do to create these connections? Are there specific things that you say or non-verbal gestures or actions that you use?
4. Is there anything that you do to help you be more present (or fully emotionally available) in these moments?
5. Is there anything you do to build trust [with the people you work with]?
6. Is there anything you do to establish boundaries for the interaction? (e.g., time, etc.)
7. Is there anything in your environment that helps or hinders you when you are trying to create these connections?
8. I am curious about how you know that you've made a connection with someone. Can you think of a specific recent interaction and walk me through how you knew you made a connection?
9. Have you had times when it was difficult to connect? What did you do?
10. Do you change your strategies for different types of people? How so?
11. Do you change your strategies in different situations (e.g., in a crisis)?
12. Are there any resources that you have found useful in developing techniques to connect and be available and present with others? Are there any experts in your profession who you'd recommend we read about or contact?
13. Is there anything else that we should know about how you create these connections?
14. What does the term presence mean to you? What does connection mean to you? Listening, rapport, trust---Can you reflect on what these words mean to you?

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Table 4. Comparative exemplar quotes from a national convenience sample of physicians and non-medical professionals about themes related to presence (n=40, interviews conducted in 2017-18)

Theme	Physicians	Non-Medical Professionals
Purposeful Intention to Connect		
Intention to connect	You want to open [communication]... You want to have people feel freedom that they can talk to you about personal things. [MD1]	I think that's the goal of presence… to obtain a connection, but you may or may not get it. [EPA enforcement agent]
Attention	I think just really being there, and being already listening to them, ...So, I don't look at the computer. I just really try to look at them. [MD1]	I like "attending" better than "presence" because it suggests that there's a relationship. [LCSW]
Focus	I guess it's just a complete focus on the patient at that time and at that moment, and really trying to give your undivided attention to that. [MD3]	Staying focused on the moment, looking somebody in the eye. [Journalist]
Listening	I think I've learned to just sit and listen and be present for when patients share their story about what's going on with them, and what's of interest to them, and really just giving them the space to talk about that and overcoming the urge to interrupt or direct the conversation. [MD8]	Listening and responding to them. ...one of the most difficult parts of interviewing somebody is truly listening... So, being present is truly listening. [Journalist]
Focusing on the client/patient story	The interview often with me is… that really intense connected moment where I'm really trying to understand their level of suffering, what this means to them, the significance of their story and how that impacts their life. [MD2]	Most of the times it's about hearing someone's story and about why they did something, and where it led them, and who they are now. And so those experiences change me often ...because I was present for [the story]. [Documentary filmmaker]

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Not being alone	...so [a patient] didn't feel like she was completely alone in that, I assessed that the best way to make her feel safe was for me to disclose my vulnerability as well. [MD2]	We haven't been alone to each other, we haven't been alone to what's greater than ourselves. [Chaplain]
Removing distractions	Well, so I kind of say that your baggage is packed. So it isn't spilling into the office visit or the phone call or whatever it is. [MD7]	It means kind of the opposite of distraction. It's kind of focus on your conversation and interaction with a person in real time and having a true sense of focus on it. [EPA enforcement agent]
Conscious Navigation of Time		
Returning to the present	It is almost like a meditation where we're taught to focus on our breathing and focus, but naturally our mind wanders, and you want to check that email. [MD3]	... the executive director of our organization…, he always uses this mantra where he says, "Now. Here. This," to stay present. And so when I remember to do that, it has been helpful. [Restorative justice lawyer]
Taking breaks	I take breaks, actually. I think that's been a big thing. I am no longer interested and I'm no longer capable, because of that, of this way of working where you're constantly doing something. [MD5]	Yeah, get a good sleep, making sure that [I've] eaten, making sure there's breaks, and that I have stuff with me to keep my energy going, like [chocolate] and water and stuff, whatever I need that day. [Documentary filmmaker]
Quiet/ silence / slowing down	I'm not in as much of a rush to get to the right answer. I'm more comfortable with the silence, with the space, with the level of certainty that comes with primary care, and understanding that I don't have to have the answer right this instant. [MD8]	I think silence is a big part of presence, and I think just taking a minute to notice, to get where the person is from, really how are you today. [Psychology professor]
Management of the Physical Environment		
Occupying the same space as a client/patient	I certainly pull the chair up close to talk to people trying to find that right distance, not too close, but certainly not across the room. Just trying to be in that space with the patient. [MD1]	Presence is a felt sense that I have of ... being seated inside myself in my body and being present in the room, sitting in the room and aware of everything that's in the room. [LCSW]

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Setting boundaries	I'll be very persistent [about staying on topic]. Like, 'Uh, no, we're not going there. We're staying here.' That's ...related to boundary setting ...trying to control things so that there can be connection, so that something can happen, so that there's time to actually engage...[MD5]	...Setting boundaries… [is] I hear you say ... 'here's what I'm going to do and here's what you're going to do. Is that okay with you?' Asking permission. [Recreational therapist]
Technology/ managing competing priorities	And so, maybe part of presence is also letting them know, okay, I'm looking at the ER visit, because you're telling me about that. [MD3]	So you close the laptop and you get away from the table and you don't look at your notes and you connect. [Psychology professor]

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Reporting checklist for qualitative study.

Based on the SRQR guidelines.

Instructions to authors

Complete this checklist by entering the page numbers from your manuscript where readers will find each of the items listed below.

Your article may not currently address all the items on the checklist. Please modify your text to include the missing information. If you are certain that an item does not apply, please write "n/a" and provide a short explanation.

Upload your completed checklist as an extra file when you submit to a journal.

In your methods section, say that you used the SRQR reporting guidelines, and cite them as:

O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med. 2014;89(9):1245-1251.

		Reporting Item	Page Number
	#1	Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g. ethnography, grounded theory) or data collection methods (e.g. interview, focus group) is recommended	1
	#2	Summary of the key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results and conclusions	4-5
Problem formulation	#3	Description and signifcance of the problem / phenomenon studied: review of relevant theory and empirical work; problem statement	6
Purpose or research question	#4	Purpose of the study and specific objectives or questions	6
Qualitative approach and research paradigm	#5	Qualitative approach (e.g. ethnography, grounded theory, case study, phenomenolgy, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g. postpositivist, constructivist / interpretivist) is also	6-7

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		recommended; rationale. The rationale should briefly discuss the justification for choosing that theory, approach, method or technique rather than other options available; the assumptions and limitations implicit in those choices and how those choices influence study conclusions and transferability. As appropriate the rationale for several items might be discussed together.	
Researcher characteristics and reflexivity	#6	Researchers' characteristics that may influence the research, including personal attributes, qualifications / experience, relationship with participants, assumptions and / or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results and / or transferability	7
Context	#7	Setting / site and salient contextual factors; rationale	6
Sampling strategy	#8	How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g. sampling saturation); rationale	6
Ethical issues pertaining to human subjects	#9	Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	7
Data collection methods	#10	Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources / methods, and modification of procedures in response to evolving study findings; rationale	7
Data collection instruments and technologies	#11	Description of instruments (e.g. interview guides, questionnaires) and devices (e.g. audio recorders) used for data collection; if / how the instruments(s) changed over the course of the study	7
Units of study	#12	Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	7
Data processing	#13	Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymisation / deidentification of excerpts	7

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Data analysis	#14	Process by which inferences, themes, etc. were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale	7
Techniques to enhance trustworthiness	#15	Techniques to enhance trustworthiness and credibility of data analysis (e.g. member checking, audit trail, triangulation); rationale	7
Syntheses and interpretation	#16	Main findings (e.g. interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	8-9
Links to empirical data	#17	Evidence (e.g. quotes, field notes, text excerpts, photographs) to substantiate analytic findings	See note 1
Intergration with prior work, implications, transferability and contribution(s) to the field	#18	Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application / generalizability; identification of unique contributions(s) to scholarship in a discipline or field	10
Limitations	#19	Trustworthiness and limitations of findings	11
Conflicts of interest	#20	Potential sources of influence of perceived influence on study conduct and conclusions; how these were managed	12
Funding	#21	Sources of funding and other support; role of funders in data collection, interpretation and reporting	12

Author notes

1. 8-9, Table 3

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What is Clinician Presence? A qualitative interview study comparing physician and non-physician insights about practices of human connection

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Manuscripts

What is Clinician Presence? A qualitative interview study comparing physician and non-physician insights about practices of human connection

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Abstract

Objective: We sought to investigate the concept and practices of "clinician presence," exploring how physicians and professionals create connection, engage in interpersonal interaction, and build trust with individuals across different circumstances and contexts.

Design: In 2017-18, we conducted qualitative semi-structured interviews with 10 physicians and 30 non-medical professionals from the fields of protective services, business, management, education, art/design/entertainment, social services, and legal/personal services.

Setting: Physicians were recruited from primary care clinics in an academic medical center, a Veterans Affairs clinic, and a federally-qualified health center.

Participants: Participants were 55% male and 45% female; 40% were non-white.

Results: Qualitative analyses yielded a definition of presence as *a purposeful practice of awareness, focus, and attention with the intent to understand and connect with individuals/patients*. For both medical and non-medical professionals, creating presence requires managing and considering time and environmental factors; for physicians in particular, this includes managing and integrating technology. Listening was described as central to creating the state of being present. Within a clinic, presence might manifest as a physician listening without interrupting, focusing intentionally on the patient, taking brief re-centering breaks throughout a clinic day; and informing patients when attention must be redirected to administrative or technological demands.

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Conclusions: Clinician presence involves learning to step back, pause, and be prepared to receive a patient's story. Building on strategies from physicians and non-medical professionals, clinician presence is best enacted through purposeful intention to connect, conscious navigation of time, and proactive management of technology and the environment in order to focus attention on the patient. Everyday practice or ritual supporting these strategies could support physician self-care as well as physician-patient connection.

Strengths and limitations of this study

- Strengths of this study include its novelty; this is the first study to use human-centered design principles and methods to systematically define clinician *presence*.
- This study uses interviews with physicians and non-physician intentionally to broaden potential options and strategies for creating presence with patients beyond those typically considered in strictly medical settings.
- Limitations included a modest dataset (n=40), which is acceptable for a qualitative investigation, and which adequately addressed thematic saturation and coherence.

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Introduction

The practice of medicine today is challenging for a number of reasons, including data-entry requirements, rapid patient turnover, inadequate reimbursement, lack of administrative support, competing demands, litigious environment, and increased complexity of patients. The demands of practicing modern medicine present many barriers to physicians' ability to deliver humanistic, patient-centered care and uphold the ideals of medicine.[1]

Patient experience suffers in an overburdened healthcare system, and meanwhile the rates of physician burnout have reached alarming levels. Almost half of physicians in the US show evidence of burnout.[2,3] Burnout is historically related to emotional exhaustion,[4] but for some clinicians may manifest as depersonalization and disengagement.[5]

While it is widely understood that system-level interventions are needed to address burnout, interventions that facilitate clinician engagement and mindfulness can also be helpful.[6] At the individual level, successfully being more "present" may make space for physicians to reconnect with the personal rewards of clinical practice, even if little else changes.

Working concepts of "presence" incorporate practice-oriented insights from across clinical care and research—including physician burnout,[2] patient-physician communication,[7] and patient-centered care[8]—and diverse other fields, ranging from business to education. However, there is little literature on "clinician presence." Other studies addressing this concept have been focused

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in niche areas such as psychology/psychotherapy,[9] palliative care,[10] or family and caregiver healthcare experience.[11] These few studies have presented clinician presence as a state of mindfulness,[9] "compassionate silence" originating from within a contemplative practice,[10] or a patient-clinician "shared presence" that relies on engagement of both parties.[11]

Our research around defining presence seeks to outline the important elements of clinician presence, and to specifically decouple it from patient-clinician communication, which is bi-directional. Clinician presence in our view can be enacted by physicians, with or without active patient reception. Although the term is commonly used, our research question centered on identifying a universal definition for clinician presence using qualitative data from interviews with primary care physicians and non-medical professionals from diverse fields in which human connection is central.

Methods

We conducted a qualitative study of semi-structured interviews in 2017-18 with physicians (n=10) and non-medical professionals (n=30) in California. Team members trained in qualitative methods (CBJ, RS, DLZ, and NS) interviewed 10 internal medicine and family medicine physicians practicing in 3 primary care clinics at an academic medical center, a Veterans Affairs facility, and a federally-qualified health center serving primarily Spanish-speaking immigrants.

Considering the scale of barriers that medicine is facing, from rising costs to physician shortages, some have called for researchers and planners to look for solutions outside of medicine. One such approach is human-centered design, which leverages insights from stakeholders at every

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level of design practice, and has been specifically called for in terms of building resilience in medicine.[12] We employed a human-centered design approach that leveraged analogous inspiration, a strategy that has been used by engineers when there is little precedent: analogous domains must be examined as a starting point from which possible context-dependent solutions can be developed.[13] Since little has been systematically documented about clinician presence in medicine, we intentionally wanted to reach beyond medicine to gather insights from analogous domains. In general, human-centered design and analogous inspiration gives us the opportunity to learn for elegant solutions that may already exist, but have not yet been utilized in the medical setting.

We used convenience sampling to interview 30 individuals systematically representing a variety of non-medical professions from 11 of the 25 occupation groups listed by the US Bureau of Labor Statistics (Table 1). Using the concept of analogous inspiration, we intentionally targeted professionals whose work involves fostering effective connections with individuals, often under stressful circumstances. We used a convenience sampling technique to identify participants, and intentionally recruited from diverse fields to create a sample representative of the range of careers.

Overall, participants were balanced in terms of gender (55% male, 45% female), and represented a diversity of race/ethnicities while skewing white/Caucasian (60%) (Table 2). Ethical approval was exempt for anonymous interviews with non-physicians by the Stanford IRB protocol 43314, September 27, 2017; and approval was granted for de-identified interviews with physicians as part of the Presence study by the Stanford IRB, protocol 42397; October 26, 2017. Interview recordings and transcripts were stored in PHI and HIPAA-compliant secure files, and were only

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available to research staff. Transcripts for clinicians were deidentified, retaining only information about role (eg. MD 1). Files were anonymous in the case of non-medical professionals, where signed informed consent was waived due to IRB exemption (#43314). Physician participants signed informed consent in accordance with IRB #42397.

Interviews explored the concept of "presence" with questions about creating connection, being more present, building trust, adjusting strategies for different people, and navigating the environment during interactions with clients and patients (see Table 3). All interviews were recorded and transcribed, and we used the constant comparative method to code transcripts, meeting frequently as a team to discuss and workshop qualitative themes.[14] Interview excerpts relevant to presence were independently analyzed by two qualitative researchers (AM – MD and PhD in Anthropology; CBJ – PhD in Linguistics) to generate core elements of presence. These elements were iteratively refined into a framework using inductive coding, which enabled us to define elements of presence as they emerged from the data. Since there was not an established definition of presence prior to this work, we did not have preset codes. We discussed the definition and coding as a full research team (12 individuals with backgrounds in medicine, implementation science, health services research, physician wellness, health communication, and linguistics) weekly over the course of a month. Detailed meeting notes were kept by two project managers, and we referred back to these meeting notes from session to session. To address biases, we debated discrepancies, but also recognized and listened to minority opinions. Research suggests that this kind of disagreement and welcoming of minority viewpoints results in better-quality coding and decision-making.[15] A working definition of presence, plus the major themes supporting this definition, were presented to our advisors and refined during discussions with the team and advisors. This resulted in: 1) a shared definition of presence; 2) a framework

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with several major themes supporting this definition; and 3) identification of cross-professional strategies for attaining presence. Data generated and analyzed as part of this research are not publicly posted due to potential opportunity to identify participants. However, data are available from the corresponding author on reasonable request. Protocols are also available upon request.

Patient and Public Involvement

Limited public involvement in the design and analysis of this research was elicited via research-in-progress presentations to the Presence Center at Stanford University School of Medicine. Patient input was not directly requested.

Results

Qualitative analyses yielded a definition for clinician presence as, *a purposeful practice of awareness, focus, and attention with the intent to understand and connect with individuals/patients*. Our framework focused on activities involved in creating presence: intentional connection, being aware of time, and managing the physical environment (Table 4).

Presence requires purposeful intention to connect.

Several interviewees noted that connection is created through "attention," "focus," and "listening just to understand." One physician described presence as "intense connected moment[s]" during the clinical interview, where "[you are] trying to understand [a patient's] level of suffering [and] the significance of their story." An enforcement agent stated that connection is "the goal of

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presence"; a chaplain defined presence as a state of "[not being] alone to each other." Presence was also described as the absence or opposite of distraction. A journalist reflected that not paying attention could indicate "this person is not really interested…in me."

Our definition of presence as "purposeful" practices intentionally includes both *deliberate* practices – practices that you intentionally choose to do – and also doing practices *for a purpose*, with the goal of achieving specific results. Deliberate practices and goals overlapped, informing our choice of the word "purposeful," and included: making an agenda "so we're clear" (physician); making a connection (high school health educator); determining how truthful people are being (enforcement agent); identifying skills and resources people need to get tasks done (software company director); listening to understand, not to develop a response (hospice volunteer); trying to empower patients (physician); supporting the feeling of making a difference (physician); and engendering trust through participant empowerment (documentary filmmaker). We see in our data that presence is central to the goals of patient care, including connecting and listening, and also to the care of the humanity of the clinician, promoting resiliency for them through feeling that they make a difference.

Interviewees described removing distractions and being prepared as key strategies to achieving purposeful intention. Some mentioned removing both literal and figurative distractions. A restorative justice lawyer described a personal ritual of brushing off external or intruding thoughts and feelings between encounters to be more present, and repeating: "Now. Here. This." Several physicians described the value of arriving early to review charts and plan, in order to enter into visits feeling prepared.

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Presence requires conscious navigation of time.

Presence was described as something temporal and tangible, happening during a specific time, and requiring protective boundaries. Time was referenced repeatedly, for example "taking a minute to notice" (health promoter). Echoing its root in the concept of being in the present, presence was defined as not thinking ahead but instead returning to the current moment. An enforcement agent also referenced presence as being aware "in real time."

Strategies related to presence and time included prioritizing brief quiet time for reflective "re-centering" breaks that physicians and professionals mentioned needing between patients/clients. A physician also suggested "not filling every moment" of the day with technological distractions to allow more time for presence. Some physicians bemoaned the lack of time for self-reflection: "I don't go home saying, 'That was a great day,' I go home saying, 'I've got all this other work to do.'" By contrast, a teacher valued the "bit of time to debrief" with colleagues as valuable because it helped them process and be ready for the next day.

Clinicians acknowledged that "time with the patient [is] the key…An offhand comment when you're talking about shoulder pain could lead you down to more chest pain." In addition to being able to use time to explore medical content, physicians reported needing more time "to keep track of the growing data set" generated by the electronic health record (EHR).

Presence requires awareness of the physical environment.

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Presence was described in terms of its physical qualities. This included concrete factors such as positioning and spacing ("being physically there"), and also more abstract physical sensations: "you feel it when the temperature changes in the room." All interviewees described the pull of competing priorities, with physicians particularly highlighting the challenge that administrative demands and the EHR pose for presence, particularly because some clinicians expressed that it is "rude for somebody to look at a screen and not look at the person in front of them."

Interviewees used space as a metaphor. In addition to referring to the literal physical environment, the use of "space" also referenced the emotional and relational environment. Discussion of space was both literal "the sound, the seats, the space, the rooms set up in a circle," and metaphorical "presence allows the space for the unknown and clinicians aren't comfortable with the unknown." Participants (physician, recreational therapist, design researcher, health promotor) often equated presence with space, as in "holding space," or "letting enough space in."

Strategies related to presence and space emphasized that, as with other physical spaces, presence requires boundaries. Participants created presence by determining who would be in the room and setting boundaries for how much personal information to share. To combat the distancing effects of technology, physicians described putting away phones during clinic visits and avoiding email. In addition, some physicians discussed strategies that preserved connection with patients during technology use: "presence is also letting them know… [you're] looking something up [in the health record]."

Physicians also utilized up-front expectation setting and help from team-members to support boundaries on time. For instance, physicians would communicate from the start of the visit with

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patients about boundaries of time, for example for the patient who arrived late: "[it's] gonna be a short visit." However, physicians were reluctant to interrupt patients on account of time, even if the visit was running over. In team-based practices, staff would also support boundaries around time by establishing visit length expectations during the rooming process, and knocking/entering the clinic room to communicate when a visit had gone too long.

Discussion

In this study of physicians and non-medical professionals whose jobs involve human connection, we found that presence is a universal concept that involves intentionality, focus, and attention to time and the physical environment. A growing body of work has explored presence in the context of healthcare system/intervention design,[16–19] and has focused on clinical conditions, actions, or training to make presence possible. To our knowledge, however, this is the first study to systematically generate a definition for presence, which may help guide research and interventions that leverage insights from within and outside the field of medicine.

Presence vis-a-vis connection, empathy, and mindfulness

Presence rightly overlaps with other core areas of patient-clinician interactions, such as connection, empathy, and emotions (both those of the patient and the physician). Extensive work in the realm of relational communication can be leveraged to support presence and shed light on how clinician presence might be achieved, for instance by attending to patient stories, avoiding interruptions, using silence and reflective listening, setting agendas, and harnessing non-verbal communication skills such as eye contact and leaning in. In this vein, interventions building

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communication skills with emphasis on presence-like relational communication have been associated with reducing burnout.[7]

Furthermore, research in the interface between emotional awareness/empathy and presence could enrich both concepts. Empathy and emotional awareness exhibited by clinicians builds trust,[20] but the documented "emotional labor" of empathy in clinical care is substantial.[21] The support that physicians need both in managing responses to patient emotions and regulating their own emotional wellbeing could be addressed through clinician presence. Presence may consist of a set of behaviors, skills, and rituals allowing clinicians to better care for patients in distress. It may also support physicians in allowing for structured rituals, such as a few deep breaths before entering into patient rooms, that are known to support regulation of emotional experience by changing neurological and physical responses in the body.[22]

Defining clinical presence gives medicine the conceptual language to examine unexplored elements of patient-clinician connection that not only enhance patient care, but also enrich clinician experience of their role as healers. Today's technology-saturated clinic environment is driving demand for interventions that foster human connection; an intervention focused on presence is a natural next step to address human disconnection in busy clinics.

Our interest in presence is motivated by the need to synthesize approaches from connection, communication, and partnership in the context of the clinic visit. We are also driven by the conviction that while fundamentals of communication, emotional awareness, or even perfected clinic flow are indeed steps towards achieving better patient outcomes, there is more to healing than any individual practice in these domains. Our framework for presence may facilitate

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continued conversation about the role of physicians as scientists, detectives, empaths, and healers.

What could Presence look like?

The features of presence lend themselves to specific practices that warrant further exploration, particularly in the areas of listening/silence, contextual awareness, and mindfulness. Presence involves learning to step back, pause, suspend expectations, and receive and connect with someone's story. Physicians interrupt their patients early and often[23]— an emphasis on listening as a prerequisite for presence opens conceptual and curricular space for teaching not only how to communicate, but when to stay silent.

Presence also lies at the juncture of interactions within clinical spaces; respondents described that it hangs in the air, is felt as a physical quality, or emanates between two people whose goals are aligned. Because presence is influenced by contextual factors for many professionals, teaching physicians to consider their physical environment could help preserve and channel connections. Specific approaches from the literature include sharing the screen so that the EHR is fully integrated into the visit, providing panel management support or scribe services, leveraging technical solutions to help support clinical decision-making, and maximizing the efficiency of the EHR.[24,25]

Looking ahead as the United States population ages, best practices for communication and connection will need to be expanded beyond the traditional patient-clinician dyad. Exploring presence may help us address the integration of caregivers, friends, and family into clinic visits

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and relationships with clinicians. Finally, mindfulness may be an important component of presence in training and clinical interactions, where even very minimal levels of effort (<5 minutes daily) may demonstrate benefit.

Limitations

Several limitations warrant discussion. First, study findings were derived from a small sample of physicians and non-medical professionals. Nevertheless, we found that we reached thematic saturation and coherence with 40 participants. Second, the study was limited to the perspective of primary care clinicians and other professionals. Future efforts should evaluate the impact of presence on patients, particularly since research has documented that physicians often overestimate their ability to communicate effectively.[26] In addition, the study's focus on individual practices to achieve presence has the potential to obscure the critical need for system-based interventions that address time pressure and technology intrusions. To be clear, while our findings suggest that presence is a central and important part of high-quality care that can support wellness for both patients and clinicians, the full onus of system change should not be placed on physicians. Misplacing the burden of responsibility solely on individual physicians without addressing system-level issues could in fact have unintended consequences of increasing expectations without adding support, which has been linked to increased burnout.[27]

Conclusion

In conclusion, human connection is central to clinical care; while challenging to cultivate, this connection offers some of the greatest rewards for practicing physicians. Insights from physicians and non-medical professionals suggest that clinician presence may be achieved

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through purposeful intention to connect, conscious navigation of time, and proactive management of technology and the environment in order to focus attention on the patient. Adopting intentional practices to support presence may make physicians more receptive to patient stories and facilitate meaningful exchanges that are critical to accurate diagnosis, clinical decision-making, and therapeutic interactions for both patients and physicians.

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Conflicts of Interest:

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Authors' contributions

CBJ was involved in data collection and analysis. She also was the primary author of the manuscript.

RS was involved in data collection and analysis. She also was a major contributor to writing the manuscript.

AM was involved in data collection and analysis. She also was a primary contributor to the manuscript.

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MCH was involved in data collection and analysis. She also contributed significant edits to the manuscript.

AT was involved in data collection and analysis. He also contributed significant edits to the manuscript.

JGS was involved in research design, data collection and also contributed significant edits to the manuscript.

DLZ was involved in data collection and analysis. She also contributed significant edits to the manuscript.

NS was involved in data collection and analysis. She also contributed significant edits to the manuscript.

ST was involved in research design and also contributed significant edits to the manuscript.

AV was involved in research design and also contributed significant edits to the manuscript.

DMZ was involved in research design and data collection, and also contributed significant edits to the manuscript.

All authors read and approved the final manuscript.

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Data Availability:

Data generated and analyzed as part of this research are not publicly posted due to potential opportunity to identify participants. However, data are available from the corresponding author on reasonable request. Protocols are also available upon request.

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Table 1. Professionals Fields from the Bureau of Labor Statistics and Occupations of Non-Medical Interviewees

Professional field/Occupation groups	Occupations
Management	Hospice program director
	Restaurateur
	Middle school principal
	CEO of a technology company
	Software company director
Business & Financial/ Sales	Television sales and marketing
	Startup sales
	Specialty beverage importer
	Realtor
Community & Social Service	Chaplain
	Licensed clinical social worker (LCSW)
	Health promoter
Education, Training & Library	Teacher
	Music instructor
	High school health educator
	Psychology Professor
	Special education educator
Arts & Design/ Entertainment & Sports/ Media & Communications	Documentary filmmaker

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	Design researcher
	Professional musician
	Creative designer
	Journalist
Legal / Protective Service	Firefighter/EMT (Chief)
	Restorative justice lawyer
	Police officer
	EPA enforcement agent
Personal Care and Service	Yoga instructor
	Hospice volunteer
	Recreational therapist
	Massage therapist

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Table 2. Characteristics of participants (N=40)

Characteristic	n	Percentage of sample
Gender		
Male	22	55%
Female	18	45%
Race/Ethnicity		
White/Caucasian	24	60%
Asian and southeast Asian	9	23%
Latino/a	3	8%
Middle Eastern	2	5%
Pacific Islander	1	3%
African American	1	3%
Age (years)		
20-29	4	10%
30-39	13	33%
40-49	10	25%
50-59	13	33%

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Table 3. Questions for interview protocol

1. What do you enjoy most about what you do?
2. Can you tell me a bit about instances in your professional work where you need to make personal connections with individuals (e.g., patients, congregants, consumers, trainees, clients)?
3. What do you do to create these connections? Are there specific things that you say or non-verbal gestures or actions that you use?
4. Is there anything that you do to help you be more present (or fully emotionally available) in these moments?
5. Is there anything you do to build trust [with the people you work with]?
6. Is there anything you do to establish boundaries for the interaction? (e.g., time, etc.)
7. Is there anything in your environment that helps or hinders you when you are trying to create these connections?
8. I am curious about how you know that you've made a connection with someone. Can you think of a specific recent interaction and walk me through how you knew you made a connection?
9. Have you had times when it was difficult to connect? What did you do?
10. Do you change your strategies for different types of people? How so?
11. Do you change your strategies in different situations (e.g., in a crisis)?
12. Are there any resources that you have found useful in developing techniques to connect and be available and present with others? Are there any experts in your profession who you'd recommend we read about or contact?
13. Is there anything else that we should know about how you create these connections?
14. What does the term presence mean to you? What does connection mean to you? Listening, rapport, trust---Can you reflect on what these words mean to you?

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Table 4. Comparative exemplar quotes from a national convenience sample of physicians and non-medical professionals about themes related to presence (n=40, interviews conducted in 2017-18)

Theme	Physicians	Non-Medical Professionals
Purposeful Intention to Connect		
Intention to connect	You want to open [communication]... You want to have people feel freedom that they can talk to you about personal things. [MD1]	I think that's the goal of presence… to obtain a connection, but you may or may not get it. [EPA enforcement agent]
Attention	I think just really being there, and being already listening to them, ...So, I don't look at the computer. I just really try to look at them. [MD1]	I like "attending" better than "presence" because it suggests that there's a relationship. [LCSW]
Focus	I guess it's just a complete focus on the patient at that time and at that moment, and really trying to give your undivided attention to that. [MD3]	Staying focused on the moment, looking somebody in the eye. [Journalist]
Listening	I think I've learned to just sit and listen and be present for when patients share their story about what's going on with them, and what's of interest to them, and really just giving them the space to talk about that and overcoming the urge to interrupt or direct the conversation. [MD8]	Listening and responding to them. ...one of the most difficult parts of interviewing somebody is truly listening... So, being present is truly listening. [Journalist]
Focusing on the client/patient story	The interview often with me is… that really intense connected moment where I'm really trying to understand their level of suffering, what this means to them, the significance of their story and how that impacts their life. [MD2]	Most of the times it's about hearing someone's story and about why they did something, and where it led them, and who they are now. And so those experiences change me often ...because I was present for [the story]. [Documentary filmmaker]

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Not being alone	...so [a patient] didn't feel like she was completely alone in that, I assessed that the best way to make her feel safe was for me to disclose my vulnerability as well. [MD2]	We haven't been alone to each other, we haven't been alone to what's greater than ourselves. [Chaplain]
Removing distractions	Well, so I kind of say that your baggage is packed. So, it isn't spilling into the office visit or the phone call or whatever it is. [MD7]	It means kind of the opposite of distraction. It's kind of focus on your conversation and interaction with a person in real time and having a true sense of focus on it. [EPA enforcement agent]
Conscious Navigation of Time		
Returning to the present	It is almost like a meditation where we're taught to focus on our breathing and focus, but naturally our mind wanders, and you want to check that email. [MD3]	... the executive director of our organization…, he always uses this mantra where he says, "Now. Here. This," to stay present. And so, when I remember to do that, it has been helpful. [Restorative justice lawyer]
Taking breaks	I take breaks, actually. I think that's been a big thing. I am no longer interested and I'm no longer capable, because of that, of this way of working where you're constantly doing something. [MD5]	Yeah, get a good sleep, making sure that [I've] eaten, making sure there's breaks, and that I have stuff with me to keep my energy going, like [chocolate] and water and stuff, whatever I need that day. [Documentary filmmaker]
Quiet/ silence / slowing down	I'm not in as much of a rush to get to the right answer. I'm more comfortable with the silence, with the space, with the level of certainty that comes with primary care, and understanding that I don't have to have the answer right this instant. [MD8]	I think silence is a big part of presence, and I think just taking a minute to notice, to get where the person is from, really how are you today. [Psychology professor]
Management of the Physical Environment		
Occupying the same space as a client/patient	I certainly pull the chair up close to talk to people trying to find that right distance, not too close, but certainly not across the room. Just trying to be in that space with the patient. [MD1]	Presence is a felt sense that I have of ... being seated inside myself in my body and being present in the room, sitting in the room and aware of everything that's in the room. [LCSW]

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Setting boundaries	I'll be very persistent [about staying on topic]. Like, 'Uh, no, we're not going there. We're staying here.' That's ...related to boundary setting ...trying to control things so that there can be connection, so that something can happen, so that there's time to actually engage...[MD5]	...Setting boundaries… [is] I hear you say ... 'here's what I'm going to do and here's what you're going to do. Is that okay with you?' Asking permission. [Recreational therapist]
Technology/ managing competing priorities	And so, maybe part of presence is also letting them know, okay, I'm looking at the ER visit, because you're telling me about that. [MD3]	So, you close the laptop and you get away from the table and you don't look at your notes and you connect. [Psychology professor]

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Reporting checklist for qualitative study.

Based on the SRQR guidelines.

Instructions to authors

Complete this checklist by entering the page numbers from your manuscript where readers will find each of the items listed below.

Your article may not currently address all the items on the checklist. Please modify your text to include the missing information. If you are certain that an item does not apply, please write "n/a" and provide a short explanation.

Upload your completed checklist as an extra file when you submit to a journal.

In your methods section, say that you used the SRQR reporting guidelines, and cite them as:

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		Reporting Item	Page Number
	#1	Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g. ethnography, grounded theory) or data collection methods (e.g. interview, focus group) is recommended	1
	#2	Summary of the key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results and conclusions	4-5
Problem formulation	#3	Description and signifcance of the problem / phenomenon studied: review of relevant theory and empirical work; problem statement	6
Purpose or research question	#4	Purpose of the study and specific objectives or questions	6
Qualitative approach and research paradigm	#5	Qualitative approach (e.g. ethnography, grounded theory, case study, phenomenolgy, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g. postpositivist, constructivist / interpretivist) is also	6-7

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		recommended; rationale. The rationale should briefly discuss the justification for choosing that theory, approach, method or technique rather than other options available; the assumptions and limitations implicit in those choices and how those choices influence study conclusions and transferability. As appropriate the rationale for several items might be discussed together.	
Researcher characteristics and reflexivity	#6	Researchers' characteristics that may influence the research, including personal attributes, qualifications / experience, relationship with participants, assumptions and / or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results and / or transferability	7
Context	#7	Setting / site and salient contextual factors; rationale	6
Sampling strategy	#8	How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g. sampling saturation); rationale	6
Ethical issues pertaining to human subjects	#9	Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	7
Data collection methods	#10	Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources / methods, and modification of procedures in response to evolving study findings; rationale	7
Data collection instruments and technologies	#11	Description of instruments (e.g. interview guides, questionnaires) and devices (e.g. audio recorders) used for data collection; if / how the instruments(s) changed over the course of the study	7
Units of study	#12	Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	7
Data processing	#13	Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymisation / deidentification of excerpts	7

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Data analysis	#14	Process by which inferences, themes, etc. were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale	7
Techniques to enhance trustworthiness	#15	Techniques to enhance trustworthiness and credibility of data analysis (e.g. member checking, audit trail, triangulation); rationale	7
Syntheses and interpretation	#16	Main findings (e.g. interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	8-9
Links to empirical data	#17	Evidence (e.g. quotes, field notes, text excerpts, photographs) to substantiate analytic findings	See note 1
Intergration with prior work, implications, transferability and contribution(s) to the field	#18	Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application / generalizability; identification of unique contributions(s) to scholarship in a discipline or field	10
Limitations	#19	Trustworthiness and limitations of findings	11
Conflicts of interest	#20	Potential sources of influence of perceived influence on study conduct and conclusions; how these were managed	12
Funding	#21	Sources of funding and other support; role of funders in data collection, interpretation and reporting	12

Author notes

1. 8-9, Table 3

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