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Imagining the 'structural' in medical education and practice in the United States: a curricular investigation

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Abstract

A number of conceptual frameworks have emerged with the goal of helping clinicians understand and navigate the intersections of the health system and broader political, economic, and cultural processes when they care for patients. In this study, we analyze the impact that one emerging framework, "structural competency," had on medical students' and physicians' understanding of societal problems affecting patient health and the practices of health systems. In this sub-analysis of a longitudinal qualitative study conducted between August and December 2020, we analyzed 19 semi-structured interviews with 7 first-year medical students, 7 upper-level medical students, and 5 physician course facilitators who participated in a course called *Introduction to Medicine and Society* at an medical school in the United States affiliated with a large urban academic medical center. This paper focuses on three main findings: how medical students and faculty describe "structures" and their effects on patients and patient care; how they use or imagine using structural competency to improve patient-physician communication and work interprofessionally to address social needs; and the emotional and personal reactions that confronting societal challenges provokes. We conclude that structural competency enhances existing efforts to improve patient-physician communication and to address patients' social needs. However, we highlight how structural competency efforts might fall short of their goal to shift physicians' perspectives "upstream" to the determinants of health due to both critical ambiguities in the concept and

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inattention to the emotional and personal impacts of addressing societal problems in the clinic. These findings have practical implications for how clinicians are trained to act on societal issues from within the health system and conceptual implications for refining how existing frameworks and curricula conceive of the intersection between healthcare and broader processes.

Keywords

Structural competency; Medical Education; Doctor-patient communication/interaction; Social Needs; Scope of Practice; Cultural competency; Affect; USA

1. Introduction

Recognizing that the work of health systems intersects with large-scale political, economic, and cultural processes, physicians and social scientists continue to develop conceptual frameworks for describing and intervening on this intersection. Often, such frameworks aim to help clinicians reckon with and navigate the complex relationships between health systems and broader societal problems that manifest during interactions with patients. As conceptualizations of society and medicine evolve, paradigms are revised or replaced to better fit present understandings.

As these frameworks—and their critiques—are taken up in medical education and practice, important questions arise about their applied implications. How do they impact the ways in which physicians and trainees imagine their roles within health systems and in broader society? Conversely, it becomes vital to understand how extant features of medical education hinder and/or facilitate the ability of clinicians and clinicians-in-training to think through and act on the relationships between health systems and broader processes.

Using semi-structured interviews, this study examines how medical students and physicians conceptualize “structural competency”—an emerging framework for thinking about and acting on “social structures” during clinical practice (Metzl and Hansen, 2014). This examination takes place in the setting of a mandatory first-year course designed to cultivate an understanding of the place of medical professionals within society. In doing so, we explore how physicians and medical students are currently understanding and communicating the political, economic, and cultural factors relevant to health and care, how they imagine responding to these factors in the clinic, and what challenges and uncertainties remain in their understanding and practice.

2. Background

Cultural competency and its critics

In recent decades, cultural competency has been the most influential paradigm for understanding and responding to how societal issues bear on the interactions between patients and clinicians (Cross, 1989; Kleinman et al., 1978). The stated goal of cultural competency is to help clinicians “[respond] to the unique needs of populations whose cultures are different from what might be called ‘dominant’ or ‘mainstream’ America” (16). Its proponents describe five essential elements for becoming culturally competent: (1)

valuing diversity, (2) “cultural assessment,” in which a system assesses itself and its own cultures, (3) “dynamics of difference,” recognizing the origins and nature of differences between cultures, (4) incorporation of cultural knowledge into service delivery models, and (5) adapting practices to address and incorporate patient culture (Cross, 1989). Cultural competency has been implemented in health policy and medical education initiatives, including its incorporation as a required domain in the Liaison Committee for Medical Education (LCME) accreditation system (Association of American Medical Colleges and American Medical Association, 2020, sec. 7.6–1).

Despite its influence, cultural competency has been critiqued for portraying culture in a reductive and essentializing fashion (Kirmayer, 2012). Social scientists, in particular, have criticized how cultural competency has made culture synonymous with ethnicity, nationality, and/or language, reducing it to a “homogenous,” and “static” variable affecting patients’ lives (Jenkins et al., 2004; Kleinman and Benson, 2006). Kleinman and Benson argue that cultural competency has become a series of do’s and don’ts for working with patients of various ethnic backgrounds, leading to crude stereotyping. Cultural competency has been additionally criticized for failing to recognize biomedicine as a cultural system itself (Taylor, 2003). Focusing narrowly on individual-level determinants of health like “lifestyle” or behaviors allows clinicians to place the blame for poor health outcomes on patients and cultural groups, which obscures how the health system is also implicated in the production of those outcomes (Carpenter-Song et al., 2007; Taylor and Wendland, 2014).

Out of these critiques came a series of paradigms aimed at re-envisioning cultural competency. Cultural humility, cultural safety, and cultural “competemility,” for example, seek to amend how cultural competency assumed a discrete endpoint of mastery (Campinha-Bacote, 2019; Fisher-Borne et al., 2015; Papps and Ramsden, 1996; Tervalon and Murray-García, 1998). These frameworks reframe the process of understanding patients’ culture as a life-long pursuit. In addition, they reframe the power dynamic underlying cultural competency, in which the clinician seeks to gain knowledge about the patient as ‘other,’ encouraging clinicians to reflect on their own “unintentional patterns” of “racism, classism, and homophobia” engrained in how they conceive of certain cultural groups (Campinha-Bacote, 2019).

Structure and structural competency

Further building on critiques of the cultural competency paradigm, structural competency is an emerging framework for helping clinicians and trainees think about and address societal problems. Structural competency is defined as “the trained ability to discern how a host of issues defined clinically as symptoms, attitudes, or diseases…also represent the downstream implications of a number of upstream decisions about such matters as health care and food delivery systems, zoning laws, urban and rural infrastructures, medicalization, or even about the very definitions of illness and health” (Metzl and Hansen, 2014, p. 218). This “stream” model of health places illness and suffering as sequelae of a broad range of historically shaped inequities in power and resources. It is this attention to “upstream” factors that the proponents of structural competency argue, distinguishes the concept from cultural competency.

The “structural” in structural competency draws on a lineage of influential theoretical work in sociology and anthropology that has gradually made its way—in revised form—into academic medicine and public health. This lineage begins with sociologists Pierre Bourdieu and Johan Galtung. Bourdieu theorized individual action as simultaneously instantiating and reproducing “social structure,” particularly class relations, thereby perpetuating inequality (Bourdieu, 1977). He used the term “symbolic violence” to explain how widespread ideologies naturalize structural relations of dominance and subordination. A contemporary of Bourdieu, Galtung coined “structural violence,” emphasizing that suffering is not simply caused by the intentional actions of individual persons, but is “built into” the “social structure” and thus seems natural (Galtung, 1969). Symbolic violence and structural violence were taken up widely by researchers in health and healthcare beginning in the 1990s. Particularly influential was the work of physician-anthropologist Paul Farmer, who has used structural violence to describe “the political and economic organization of our social world” that harms individuals and populations (Farmer et al., 2006, p. 1686). Structural competency is explicitly grounded in both Bourdieu’s and Farmer’s theories of “structure” (Metzl and Hansen, 2014). It also draws on more recent work of public health researchers, who have adopted the notion of “structure” to very broadly refer to the range of political, economic, and cultural factors that negatively influence health (Feagin and Bennefield, 2014; Graham, 2010; Lomas, 1998; Rose, 2011; Scambler, 2006).

Following this recent broad use of the concept in public health and medicine, Metzl and Hansen use “structural” to refer to a wide gamut of features and processes including:

> buildings, energy networks, water, sewage, food and waste distribution systems, highways, airline, train and road complexes, and electronic communications systems that are concomitantly local and global, and that function as central arteries in some locales and as sclerotic corollaries in others…the oft-invisible diagnostic and bureaucratic frameworks that surround biomedical interactions, and that potentially shape the contents there within. And…[the] assumptions embedded in language and attitude that serve as rhetorical social conduits for some groups of persons, and as barriers to others (2014, p. 128).

Structural competency follows social scientific critiques (Drought and Koenig, 2002; Kaufman, 2015; Kaufman et al., 2006; Mol, 2008) in challenging the logic of individual autonomy in medical care (Schneider, 2012)—the presumption that patients’ health behaviors and healthcare trajectories are solely products of their own choices. The framework is an explicit attempt to integrate this challenge into medical pedagogy. In their 2014 paper, Metzl and Hansen outline five intersecting “skill-sets” that constitute structural competency in clinicians: (1) Recognizing the structures that shape clinical interactions; (2) Developing an extra-clinical language of structure; (3) Rearticulating “cultural” presentations in structural terms; (4) Observing and imagining structural intervention; and (5) Developing structural humility (2014). As these skills suggest, a central goal of structural competency is to train clinicians to redirect their gazes from the individual specificities of patients’ illness and suffering, shifting attention “beyond the exam room walls” to the “upstream” factors that shape health and healthcare. The use of a structural competency framework can help clinicians observe, “imagine,” and even

implement “structural interventions” that take many forms, spanning from the interpersonal level to the institutional or policy level, since structures are built by human actors and “are thus subject to revision though imagination, reparation, and transformation” (Metzl, 2012, p. 217). Structural competency has recently been used as a framework for advocacy, research, medical education, and personal reflection (Hansen et al., 2018; Kirmayer et al., 2018; Neff et al., 2020).

Though structural competency is increasingly incorporated into medical curricula, how clinicians and trainees understand and operationalize the framework has not been adequately characterized. Furthermore, it is important to track the subtle but important shifts in meaning that occur as concepts intended to address societal problems are circulated in the individualizing, neoliberal cultural spaces of American biomedicine (Good, 1993; Taylor, 2003). Additionally, to ensure these frameworks are meaningfully correcting the shortcomings of cultural competency, attention should be given to the ways that clinicians and trainees conceptualize themselves, their role as clinicians, and their patients within these frameworks. Accordingly, this study explores the experiences of students and physicians as they grapple with what structural competency means for their professional roles within healthcare systems and perceive the possibilities and limits of transforming these systems through greater awareness of “structural” factors.

3. Methods

Study Design, Setting, and Sample

This paper reports the findings of a sub-analysis of a longitudinal qualitative study evaluating the outcomes of integrating the structural competency framework into a required undergraduate medical education course, *Introduction to Medicine in Society* (Dao et al., 2017). The longitudinal study consisted of semi-structured interviews conducted with first-year medical students and their course facilitators, both physicians and senior medical students. Interviews were conducted at three different points during the course. This sub-analysis presents results from interviews conducted during the third and final time point. Of note, the authors were involved in the course as senior student facilitators (RB and OF) and as a member of the curricular design team (RB).

The study was carried out in Fall 2020 at an American medical school affiliated with a large urban academic medical center serving a patient population of diverse socioeconomic status and race/ethnicity. The approximately 150 first year students were required to take the 12-session *Introduction to Medicine in Society* course in their first semester. The course occurred biweekly, with each session focusing on a dedicated theme related to social topics in medicine. This was the only required course in the first semester curriculum that focused on social scientific material. Due to the COVID-19 pandemic, much of the course was conducted over Zoom.

At the start of the course, students and faculty participated in one session specifically dedicated to teaching the structural competency framework to learners. The session consisted of two parts: a plenary lecture on structural competency (1 hour) followed by a facilitated discussion about structural competency (2 hours and 15 minutes). Prior to the

sessions, students were assigned required readings (Coaston, 2019; Kleinman and Benson, 2006; Metzl and Hansen, 2014) and were asked to write a short reflection on their reaction to the Metzl and Hansen piece. During the plenary, two medical student-anthropologists described the structural competency framework, applied this framework to a clinical case, and offered several in-depth examples of programs in the affiliated health system that addressed societal problems. Following the plenary, students and facilitators joined small groups to share their understandings of and reflections on structural competency. Structural competency was revisited in each of the subsequent ten sessions in relation to the respective themes of those sessions.

The three groups of interviewees—first-year students (S), senior student facilitators (SF), and faculty facilitators (F)—were purposively selected based on their different positions as learners and educators with varying experience working in the health system. Previous research on this curriculum has shown that these groups differ in their understanding of and comfort with discussing social topics in medicine, like structural competency (Logan and DeLisser, 2019). As such, these groups were selected to capture this breadth of experience with these topics. Senior medical students and returning faculty facilitators were previously exposed to the structural competency curricula, while first-year medical students and new faculty facilitators experienced it for the first time. All first-year learners and course facilitators involved in the Fall 2020 *Introduction to Medicine in Society* courses were eligible to participate in this study, and all were emailed with an invitation to interview.

Data Collection

Interested students and facilitators participated in semi-structured, one-on-one interviews conducted by either RB or OF. Interviews were conducted via the Zoom teleconference platform or via telephone. Participants were informed that their participation in the interviews would contribute to both internal curricular improvement and to scholarly publication. Verbal informed consent was obtained. Participants were given the option to be interviewed at three separate time points during the semester: (1) within two weeks prior to the structural competency session, (2) within two weeks after the structural competency session, and (3) at the end of the course. The first two interviews focused on the educational expectations and experience of the structural competency session and the course, while the third interview explored how participants used or imagined using structural competency within the health system. All students and facilitators in the course were invited to participate at each of these time points in the study, and participants were able to participate in an interview during any or all the time points. Interview questions were tailored to capture core questions related to structural competency and to when the interview occurred in relation to the course. All interviews were conducted between August 2020 and January 2021. The study was deemed exempt by the Institutional Review Board of the University of Pennsylvania, United States.

Analysis

Interviews from third time point of the longitudinal study were analyzed in this specific study, as these interviews focused on how participants saw the possibilities of using structural competency in clinical practice. Interviews were transcribed by one member of

the study team (RB or OF). Supervised by JTC, RB and OF generated codes from a close reading of an initial sample of five transcripts, then defined codes through discussion and formalized them into a codebook (MacQueen et al., 1998). This codebook was used by RB and OF to double-code the entire corpus of transcripts. Codes were compared to evaluate consistency and discrepancies were rectified by discussion and consensus. After coding, the entire team—with cumulative experience in clinical medicine, health services research, medical and linguistic anthropology, and medical education research—was brought together in a series of meetings to perform focused coding (Charmaz, 2014), prioritizing themes based on their frequency or significance, refining them, and synthesizing related themes.

Results

All 19 interviews from the third study time point were analyzed for this study (participant demographics in Table 1). Of the participants, 5 were physician facilitators. Specialties of faculty members included one internal medicine physician, one surgeon, and three pediatricians. Seven participants were upper-level medical students who completed their clinical rotations, or apprenticeship period in the clinic, and 7 participants were first year medical students.

Descriptions of structure and structural competency

Facilitators and students were asked to conceptualize the meanings of both structure and structural competency. Participants gave examples of many structures that primarily affected patients, including (in order of frequency): economic (10 participants), racism (8), culture (7), food or healthy food (7), neighborhood conditions (7), history (6), housing (6), politics (6), religion/faith (6), gender (5), government (5), documentation/citizenship (4), poverty (4), race (4), transportation (4), violence (4), clean water (3), sexuality (3), banks/bank loans (2), ethnicity (2), capitalism (1), and employment (1). Additionally, when asked what structures they encountered in the health system, participants mentioned insurance (11), medication access (8), access to care (7), healthcare quality (3), access to interpreters (2), hospital location (2), and health equity (1).

In nearly all the interviews, structures were described as synonymous with “society,” “infrastructures,” “institutions,” “organizations,” and the “social.” Participants used combinations of these terms interchangeably within the same interviews. Overwhelmingly, while participants described structures as existing beyond the level of an individual, they conceptualized these structures as acting on the individual person or their families. One participant stated:

> Structure is anything beyond the single person. So that is institutions of any level, policymaking at any level, whether it's the medical ICU or whether it’s federal or global policy or standard of care. It’s thinking about how our societal structures influence an individual’s health (F4).

Interviewees also relied on more descriptive images to discuss or define “structure” and “structural.” They described their magnitude as “big” and “large,” and their consistency as both “concrete” and “amorphous.” Participants also used metaphors to describe structures, such as a “structural mesh” (S4). For example, while reconsidering an earlier metaphor of

structures as “framed houses,” a faculty member described social structures as “steel girders, they're so strongly embedded into the freakin’ bedrock that, like, what is one person going to do?” (F3)

Participants discussed the “built,” “designed,” or “constructed” nature of structures. One participant described that “the term structural…implies that something was built and that it’s something that can probably be unbuilt or formed, remodeled or something. But whatever it is, it’s something that we’ve created” (S1). Although participants did not name specific actors who were building the structures, they mentioned that structures were constructed by society at large or by those in positions of power. Participants emphasized that the creation of structures was not random, but rather purposefully designed to “benefit” or “help” some people while also working as a “barrier” or “to hurt” others. For example, one participant stated: “[Structures] create the scaffolding for how things operate. Rooted within that are systems that reinforce and perpetuate the outcomes that you see. The system is perfectly designed to get the outcome that you see, and so if it’s racism that you’re after, it’s well designed for that," (F5). While construction of structures was described to have a historic dimension to it, they were also viewed as dynamic and able to be changed through a slow and difficult process.

Structures acting on patients and physicians

Participants described their understandings of how structures interact with patients, physicians, the health care system, and society. Students and faculty initially used the figure of the patient to describe the individual effects of structures. Only after further prompting did many discuss how structures impact their own clinical practice and, less commonly, themselves as people. When participants spontaneously discussed how structures affected them directly, they often explicitly referenced how a particular identity they possessed was either marginalized or privileged in society.

In describing how structures interact with patients, participants often stated that these structures were beyond the patient’s “control.” However, they described these structures as directly affecting patients' health and wellbeing, their choices, and their decision making. Participants stated that these structural impacts on patients ultimately affected how they imagined providing care in the clinical encounter:

> I can't really be prescribing things for [patients] that they can't get. That's pointless. I can't advise them to get things that they don't have access to. And if they're only coming to me because of lack of access, what can I do to get them access to something? (S5)

Resolving uncertainties with structural competency

As participants described their understandings of structural competency, they revealed a number of uncertainties and unresolved tensions with the concept and its application in medicine. Despite readings, a plenary, and facilitated discussions on the topic, some participants expressed that they still did not completely understand the concept or its constitutive sub-parts of “structural” or “competency.” Others described the concept or its parts as “vague” (SF5) or overly abstract (S5). While some participants felt the term gave

them a name for actions they had already been doing in practice, others felt there were already many similar terms to describe this practice:

> The average practicing physician, when you approach them and mention something like this to them, and use the word structural competency, they're not going to really know what you're talking about. But if you say, well do you notice these things in your patients and these potential impacts, and you describe some of them, then they will know what you're talking about (F5).

Others thought that the emphasis on learning a new framework distracted from what they imagined as the actual practice of structural competency: "[It's] just an understanding of structural influences on a patient's life. That would be so much easier for anyone to understand. You label it structural competency and you lose half your audience. [I] think that's a little foolish" (S5).

The physician's scope in acting on structures

Following their descriptions of structures, structural competency, and their effects on patients and physicians, interview participants described how they would apply a structural competency framework in clinical practice. Notably, when asked if or how they might act on structures as physicians, interviewees only discussed acting on features of patients' lives rather than addressing structures that affect physicians. Participants questioned the extent to which physicians could or should engage with structures. While most participants recognized that it was important or even "necessary" (F4) for physicians to be aware of structures, there was greater variability in terms of how participants thought physicians should respond to them. Some worried that physicians who were too involved in addressing structural issues might be operating outside of their expertise, stepping out of their "medicine lane" (S6). Others felt that acting on structures was an intrinsic part of their job as a physician.

Participants discussed how they recognized and navigated structural concerns within a hierarchical understanding of different scales of clinical action, from the patient-physician dyad to the medical team and broader health system, and finally, at the level of organizational culture change and local or supra-local policy. When conceptualizing the possibilities of acting on structures, almost all participants saw limited potential to instigate change while working as an individual physician. One student reflected on this by stating:

> Would you pay for your patients' medication? Why or why not? Would you offer them a ride home? Why or why not? I think to an extent that yes, as a person, I can easily do that if I were to have an attending salary. But it misses the reality of social constructs. That this is not an individual problem. This is a society problem (SF4).

When discussing the potential to operationalize structural competency in the patient-physician dyad, participants expressed that social and cultural dynamics within medicine undermined their ability to meaningfully navigate those dynamics . Many cited the cultural norms within medicine as a practical constraint to achieving the goals of structural competency. Trainees described how the hierarchical nature of medicine made them feel that they were not able to speak up or act in the presence of resident or attending

physicians. These hierarchies not only disrupted trainees' efforts to center patients' concerns in the learning process, but also led some participants to feel like they did not have the "ownership" (SF7) or ability to redirect a patient's care to meaningfully address those concerns. Others described how norms like wearing a white coat or using "derogatory" terms like "frequent flyer," reinforced power dynamics within hierarchical medical teams and between patients and physicians. Participants also described factors such as "time, energy, money, and systems that work us to the bone" (SF3) as limiting physicians' abilities to recognize and act on the structures that affect them and their patients.

Participants at all levels of training imagined working in a team to address the circumstances affecting patients' health and healthcare. They described how a team could provide "varying perspectives on how to deal with the structures," (S7). While several participants stated that a team approach would leverage various professionals with different skillsets to address structures, few people named specific actors who would work in this team. When actors were named, social workers and case managers were commonly cited by interviewees as members they wanted on their team to address structures.

While some participants focused on working as a team to address the structural factors in patients' lives, most participants saw referring patients to other health professionals as one of the only ways physicians could act on structures. "I don't feel like I can do anything about someone's insurance status other than refer them to a social worker," one participant (SF5) stated. Social work, case management, social needs response teams, and chaplains were commonly cited as people to whom participants could refer patients. In reflecting on how they imagined addressing structures in the clinic, one participant stated:

> …or even when I feel like I'm in a position to maybe do something about it, like talk to a social worker, see if we could figure out XYZ service for this patient, when I feel like I or somebody else on the team is able to mobilize resources in a way to, at least in that moment, help the patient, I think that structure doesn't feel as insurmountable (SF3).

In addition to referring to teams within the healthcare system, participants also discussed engaging with resources outside of the medical system. For example, participants discussed referring patients to community clinics and programs to connect patients to services such as food and nutrition, social support, and legal services. In these instances, participants often described themselves as actors outside of the community and presented partnering with community members or having them on their team as a potential solution to addressing the limitations of their outsider status.

Structural competency as improving clinical communication and patient-physician relationships

The previous section described how participants imagined structural competency as most effective when operationalized at scales greater than the individual physician. Yet, in conceptualizing how they imagine using a structural competency framework, many participants felt that, as individuals, they could use it to intervene at the level of the patient-physician dyad. In particular, students and facilitators described the ways that structural competency enhanced communication and the patient-physician relationship. One student

described the possibilities of applying structural competency as follows: “I think with structural competency in mind, you could inform the questions we ask, it could inform our reactions, it could inform the compassion that we're able to show, which helps somebody open up more” (S4).

Almost all participants imagined that structural competency would increase their awareness of structures affecting patients’ lives. They discuss how this increased awareness would allow physicians to ask better and more open-ended questions to facilitate communication during the clinical encounter. One physician narrated how her growing structural competence informed her question-asking during interactions with patients:

> I’ve learned to ask people very open-ended questions…like, ‘okay, how frequently do you take your albuterol, your asthma inhaler, or your inhalers?’ And to ask instead of just making assumptions. I used to initially just make assumptions. ‘Oh, they said they would take it once a week because that's as frequently as they want to take it,’ and just make a closed assumption, closing the dialogue there. But to kind of continually ask, ‘okay, tell me more about that?’ (F1).

Participants also described that having a better understanding and awareness of patients allows physicians to be non-judgmental and empathetic. This was particularly apparent in how interviewees imagined reframing their clinical approach to remove shame or blame from the patient:

> I hear a lot of [clinicians] that make a lot of assumptions and blame people. ‘How could this person do this? How come they’re not taking these medications?’ And I think about really trying to go against that view and not blame an individual for, you know, whatever…To recognize that…what we would consider perfect decisions [are] probably [a] function of having very good resources. Not that they’re a better person; just keeping that in mind and not judging patients,” (F1).

Study participants opined that the empathy and non-judgment that comes from recognizing structures ultimately enhances a physician's ability to connect and relate to patients, thus improving the patient-physician relationship. In describing how he uses structural competency, one physician stated:

> “I think the ability to be open and to relate to people in general, and to have a degree of emotional intelligence and an openness to others, especially if they’re different than me, helps tremendously in my clinical practice…It allows a connection that gives that person a degree of comfort….I’m a surgeon, so I’m going to cut you, right. I’m going to inflict some pain on you on the way to hopefully getting better…So I want to show some warmth and…humanity” (F3).

Affective response to structural competency

A ubiquitous theme in the interviews was the affective response to learning about, imagining, or actually taking action to address structures. Over the course of the interviews, many participants gradually reflected on how an awareness of their personal identities and positions in society was integral to pursuing structurally competency. In particular, participants discussed how their relative privilege, in comparison to their often

"marginalized" or "disadvantaged" patients, led to "blind spots" (SF6, paraphrased in S3, SF4, and SF7) that inhibited their ability to recognize structures, identify resources, or navigate structural constraints in their patients' lives. To resolve these "blind spots," they expressed needing to reflect on the biases and underlying assumptions clouding their understanding of their patients. One physician stated, "And I guess through self-reflection, you know, whatever self-reflection, therapy, getting my master's degree, this is the way that I've evolved to deal with this" (F3).

Participants expressed a spectrum of emotions when reflecting on the structural competency framework. Some participants felt empowered (8 participants), hopeful (4), confident (2), optimistic (2). They emphasized the importance of humility when addressing structures (8). Others expressed feeling exhausted (4), powerless (4), sad (4), discouraged (3), overwhelmed (3), frustrated (3), being "stuck" (2), hopeless (2), unprepared (2), worried (2), angry (1), distressed (1), and/or fearful of hurting a patient or that acting on structure would make "things worse than they were before" (SF5) (1). The affective responses not only spanned a range from positive to negative but were also inflected by the perceived ability or lack thereof to respond to structures. Participants narrated that these personal reactions affected their professional capacities, including leading them to potentially develop burnout (4) or imposter syndrome (2), doubt their abilities (1), and lack confidence (1).

When learning about the myriad ways structures affect patient care, participants often described feeling overwhelmed, hopeless, and powerless, as was the case for one student facilitator, who remembered:

> Trying to have discussions with people about the structural barriers to [medical] care that a lot of times we don't have any kind of direct influence over, and I think it made a lot of people feel hopeless. And a lot of students kind of expressed that (SF5).

When he learned how "long standing" and "entrenched" structures are, another student described that he felt "powerless" to change them despite his increased awareness of their existence.

The emotional responses of participants when describing the possibilities for and limitations to acting on structures coalesced into a series of longer-term concerns about burnout, humility, and empowerment. Burnout was discussed as either a condition a participant had developed or "feared" they would develop in responses to not being able to fix the structural factors in patients' lives. Notably, burnout was discussed most frequently by first-year students and student facilitators, who were concerned about navigating structures in their future clinical careers.

On the other hand, humility, whether in reference to "structural humility" as theorized by Metzl and Hansen (2014) or a more general attitude, was discussed as an aspirational perspective to have on the complexity of navigating societal problems while working in health systems. Burnout and humility were often discussed separately. However, one student positioned them as two possibilities for reacting to structural factors:

> [I feel] very humbled by the amount of nuance in different situations. And I say humbled instead of overwhelmed because I think humble is a better word, and it shows that this can be a positive thing. It's good. It's an awesome privilege to be able to work with patients in these kinds of nuanced situations, but it's nonetheless a lot to work through…but sort of just to recognize that you can't do all of it, I think it's also an important lesson to learn because I think burnout comes when you think you can fix everything and then once you can't, you get very depressed by that (S1).

Some participants also felt empowered and hopeful. These emotions were often described when participants described the possibilities of acting on structures in the future. One student described how hearing from a panel of physician advocates inspired "hope" "that we can be a generation of physicians to change the dialogue and to emphasize the importance of structural competency in medicine" (S7).

Discussion

Motivated by the persistent challenge of educating clinicians about the intersection of health systems and broader political, economic, and cultural processes, we undertook this study of medical student and faculty perspectives on the emerging framework of structural competency. The medical students and physicians we interviewed found structural competency effective at the level of the patient-physician dyad by helping them improve their communication with patients. Medical students and physicians additionally recounted how structural competency drew their attention to the need for interprofessional engagement with personnel in and outside of health systems to address the social needs of patients. Study participants could imagine how to concretely apply a structural competency framework at the level of these proximate connections within the health system. However, participants struggled to imagine actions that they could perform from their respective positions in the health system that they thought would have an effect on 'structure.' Relatedly, this study reveals limitations to enacting a structural competency framework in medicine, which include uncertainty about how to act on structures, the perceived separation of the health system from society and clinicians from societal problems, and the myriad emotional responses associated with confronting these problems as clinicians. These limitations highlight problems with the structural competency concept. They also suggest that U.S. medical education frames the role of clinicians in a way that disassociates physicians and trainees from large-scale processes, constraining their ability to enact novel frameworks such as structural competency to effect broad change.

In thinking about how to operationalize structural competency in clinical practice, medical students and physicians perceived their growing structural competence as a tool for eliciting information about the patient's lived experience and building a strong therapeutic alliance through empathetic communication. While a central goal of structural competency is to encourage clinicians to reframe patients' illnesses and symptoms in terms of their upstream causes, participants in our study did not articulate it this way. Instead, they saw structural competency as a framework for enacting empathetic communication because it allowed them to see previously "unseen" aspects of how health systems and broad societal factors

shape patient care (Taylor and Wendland, 2014). This outcome is not unlike the goals of many communication paradigms in medical education and clinical care that have been prominent for several decades (Katz, 2002; Ofri, 2017; Weiner, 2004), including early work on cultural competency that understood the patient-physician alliance to be the basis for culturally sensitive and relevant communication between physicians and patients (Kleinman et al., 1978). Programs for "patient-centered" communication reform such as shared decision making (Charles et al., 2006) and patient empowerment (Aujoulat et al., 2007) have sprung up out of concern for the negative impacts of the asymmetric and paternalistic dynamics of the patient-physician dyad on quality of care (Pilnick and Dingwall, 2011). While structural competency has not previously been construed as part of this lineage of clinical communication reform, our interviewees' emphasis on applying a structural competency framework to improve their understanding of the patient experience and thereby improve the clinician-patient relationship suggests that it is being operationalized in much the same way.

Interviewees' emphasis on acting on societal issues at the level of the patient-physician dyad reflects realities of medical education and clinical practice in United States health systems. Patient care in medical education is largely taught within the model of a physician-patient dyad (Swinglehurst et al., 2014), restricting the physician's role to the exam room. Medical education produces and frames the space of the physician-patient encounter as the most readily accessible and legible site of intervention and action (Briggs, 2020; Waitzkin, 1991). Thus, by focusing on the patient-physician dyad as a primary site to draw on their structural competency training, clinicians and trainees may be reproducing the dyad as the primary scale at which to encounter and address social concerns.

The definition of "structural competency" might reinforce the patient-physician encounter as the site for physician and health system intervention on broader processes because of its directional nature. Structural competency envisions the patient-physician encounter as "downstream" from "upstream" structures. This "downstream" directionality positions health as an endpoint to be intervened upon during the patient-physician encounter. Other frameworks such as the "cliff' model of social determinants (Jones et al., 2009) and the socio-ecological model (Bronfenbrenner, 2005) have been criticized for this very directionality, which creates artificial boundaries between health and societal factors and fails to recognize that the health system is part of the broader social world (Yates-Doerr, 2020). When physicians and trainees imagine themselves working at their patients' "downstream" endpoints, they reinscribe a dichotomy where their clinical actions in the health system are separate from the "social" or "cultural" domains of patients' lives (Taylor, 2003).

While medical students and physicians focused on the potential of drawing on their structural competency training to intervene through enhanced communication at the level of the patient-physician relationship, they also saw the potential to use it to modify individual patients' living circumstances. They described how developing structural competence encouraged them to address patients' ability to find food or legal resources, access medications, and enroll in public health insurance. These concrete ways of working in and around health systems resemble the "health-related social needs" projects currently receiving attention in health policy circles (Castrucci and Auerbach, 2019; Green and Zook, 2019).

"Social needs" programs involve screening patients for a range of environmental factors that impact health (e.g., housing, food, utilities, personal safety, transportation, etc.) and offering referrals to partner organizations (Alley et al., 2016). Unlike structural competency, the social needs paradigm does not base its actions in an understanding of large-scale political, economic, and cultural processes, and hence it can be thought of as working "in" or "around" health systems rather than "on" them. The medical students and physicians we interviewed rarely discussed connecting patients to these social needs themselves. Instead, they described the necessity of a host of other professionals within the health system, principally the social worker. Likewise, interviewees expressed the importance of community organizations that would help connect patients to resources, even as some of them presented themselves as not members of the community they served. Other healthcare professionals were most often enlisted to address the social needs affecting patients through practices of referral. Notably, participants referred patients to other healthcare professionals not because they "rushed to delegate the messiness" (Kasper et al., 2016, p. 630) of social concerns or considered the professionals as beneath them, but rather, the opposite: they recognized that these professionals possessed knowledge and expertise uniquely suited to address patients' social needs (Downey et al., 2019). Referral—rather than more directly collaborative forms of care—is regularly available within the existing environment of US academic health systems, so represents an instance of participants working to address social needs within the structure of the clinic.

Communication and addressing patients' social needs were the two main ways in which the medical students and physicians we interviewed operationalized structural competency. They described many challenges to operationalizing the framework at broader scales. A major challenge was presented by the concept itself. "Structure" was envisioned by interviewees in myriad ways even within the same interview. It was freely interchanged with numerous other terms ("society," "infrastructures," "institutions"), viewed as simultaneously concrete and amorphous, used to refer to everything from broad cultural categories that order social relations, to political and economic inequities, to discrete material determinants of health. "Structure" ultimately operated as a near totalizing category for our interviewees. Social scientific critics of "structure"-based theorizing have observed that the concept is troublesome even among scholars, who have used it to analyze to processes that occur at quite different scales of time and space (Lemke, 2000; Swartz, 1998; Wortham, 2012). These processes are not "one kind of thing" (Wortham, 2012, p. 130), and they work to constrain the actions and opportunities of individuals in different ways.

The extreme variety and often large magnitude of "structures" in turn led to previously recognized but underappreciated affective responses among medical students and physicians (Neff et al., 2017). The sheer number of structures that interviewees identified often led them to balk at the potential of being "competent" in all of them. As such, in line with the intended goals of structural competency, many strove for an awareness and, most notably, a humility towards their approach towards acting on structures in patient care. Yet, far from being incidental to the experience of trying to recognize and intervene on structures, the spectrum of affective responses to accounting for structures—often from a position of relative privilege—were perhaps the most prevalent and impactful to interviewee's visions for their future in medicine. These emotional responses extended across a spectrum, from

empowerment and humility to feelings of being overwhelmed, hopeless, and powerless in the face of structures. Participants feared these concerns of hopelessness and powerlessness would lead to burnout and a pervasive sense of futility. The emotional load associated with learning about and pursuing structurally competency may have lasting implications on the wellbeing of physicians and trainees.

In presenting these findings, it is important to also note their limitations. Interviewees were drawn from one medical school, and the sample size was relatively small and likely self-selected based on interest and perceived importance of the topic of the study. While the course was mandatory for first-year students, the senior student and faculty facilitators volunteered to facilitate the course and therefore had a predefined interest in social topics in medicine. Furthermore, based on varying levels of clinical training to date, participants have a wide range of hands-on clinical experiences on which to draw, which may have impacted the character of their responses. Additional work in larger, more generalizable samples of medical students and physician faculty—especially at multiple institutions—is needed to extend our findings. While this study was constrained to the experiences of a single institution and a single curriculum, it provides a novel institutional perspective on how physicians and trainees are responding to an emerging framework.

The structural competency curricular module clearly did achieve some of the goals of structural competency. Specifically, study participants discussed how they were better able to recognize the forces shaping patients' lives and the clinical interaction. Participants also explained how they imagined intervening on these forces. Yet, the interventions that medical students and physicians imagined enacting—communicating directly with or referring to an interdisciplinary team aimed at addressing patient social needs—do not intervene on any processes extending beyond the daily lives of patients and the daily workflow of the clinic. In reflecting on the effects of structural competency in this group of interviewees, it is not clear that the framework allowed participants to achieve goals distinct from patient-centered clinical communication training and social needs response programs.

We propose several future directions for the study and teaching of structural competency to extend its impacts beyond reforming clinical communication and addressing individual social needs. First, there is a need for conceptual refinement. As noted previously, the term "structure" draws on a lineage of scholarship in social science, public health, and medicine that has been troubled by its tendency to use the term in totalizing fashion (Lemke, 2000; Wortham, 2012). The concept's vagueness not only provokes confusion in the learning process but also can lead to uncertainty and distress as clinicians and trainees try to operationalize it to navigate health systems and the broader processes bearing on them.

Second, structural competency is emerging within a contemporary landscape of medical education where learners are inundated with overlapping concepts—competency, cultural competency, patient-centered communication, social determinants of health, social needs, and so on—which preconfigure their perceptions of structural competency. Already established paradigms infiltrate perceptions of how to use structural competency. While the term was originally intended to move beyond a narrow focus on culture and the ways it became a proxy for essentialized interpretations of race and ethnicity (Kleinman and

Benson, 2006), a focus on "structure" risks essentializing even broader swaths of people through assuming and ascribing certain processes as acting on people falling within the very large category of 'socially marginalized.' To prevent the structural competency frameworks from reproducing essentializing and static ideas about marginalized patients (and fellow clinicians), it requires a clear and legible re-socializing approach designed with clinicians in mind that simultaneously educates *against* the default understandings of political, economic, and cultural issues within medicine and provides clear direction and examples of the ways clinicians can think and act on large-scale processes. This requires adopting an approach that emphasizes how both health systems and structures are not disembodied entities, but rather composed of and changed by the collective actions of individuals.

Third, the constraints of US biomedicine and health systems provoke affective responses that shape clinicians' abilities to transform their knowledge of "structural" factors into meaningful change. These reactions have been underappreciated in the structural competency literature and in medical education broadly (Kleinman, 2011). An initial step to help reorient the structural competency curriculum to better achieve its stated goals would be to reposition humility, rather than competency, as the explicit goal of this framework. These curricula should encourage clinicians to strive for humility in the face of complexity through a continual process of learning about self and society within their own positionalities as clinicians and people; to value the knowledge of other experts and organizations within and beyond the healthcare system; and to search for opportunities to equitably meet patient's social needs within current constraints while also striving to work collectively to produce societal change.

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References

Alley DE, Asomugha CN, Conway PH, Sanghavi DM, 2016. Accountable health communities—addressing social needs through Medicare and Medicaid. N Engl J Med 374, 8–11. [PubMed: 26731305]

Association of American Medical Colleges, American Medical Association, 2020. Functions and Structure of a Medical School: Standards for Accreditation of Medical Education Programs Leading to the MD Degree.

Aujoulat I, d'Hoore W, Deccache A, 2007. Patient empowerment in theory and practice: Polysemy or cacophony? Patient Education and Counseling 66, 13–20. 10.1016/j.pec.2006.09.008 [PubMed: 17084059]

Bourdieu P, 1977. Outline of a theory of practice. Cambridge Univ. Press, Cambridge, UK.

Briggs CL, 2020. Beyond the Linguistic/Medical Anthropology Divide: Retooling Anthropology to Face COVID-19. Medical Anthropology: Cross Cultural Studies in Health and Illness 39, 563–572.

Bronfenbrenner U, 2005. Making human beings human: Bioecological perspectives on human development.

Campinha-Bacote J, 2019. Cultural competemility: A paradigm shift in the cultural competence versus cultural humility debate—Part I. Online Journal of Issues in Nursing 24.

Carpenter-Song EA, Schwallie MN, Longhofer J, 2007. Cultural Competence Reexamined: Critique and Directions for the Future. PS 58, 1362–1365. 10.1176/ps.2007.58.10.1362

Castrucci B, Auerbach J, 2019. Meeting individual social needs falls short of addressing social determinants of health. Health Affairs Blog 10.

Charles C, Gafini A, Whelan T, O'Brien MA, 2006. Cultural influences on the physician–patient encounter: The case of shared treatment decision-making. Patient Education and Counseling, 3rd International Conference on Shared Decision Making 63, 262–267. 10.1016/j.pec.2006.06.018

Charmaz K, 2014. Constructing grounded theory, 2nd Ed. ed. SAGE Publications Ltd.

Coaston J, 2019. The intersectionality wars. Vox.

Cross TL, 1989. Towards a culturally competent system of care: A monograph on effective services for minority children who are severely emotionally disturbed.

Downey MM, Neff J, Dube K, 2019. Don't "just call the social worker": Training in structural competency to enhance collaboration between healthcare social work and medicine. Journal of Sociology and Social Welfare 46, 77–95.

Drought TS, Koenig BA, 2002. "Choice" in end-of-life decision making: researching fact or fiction? Gerontologist 42 Spec No 3, 114–128. 10.1093/geront/42.suppl_3.114

Farmer PE, Nizeye B, Stulac S, Keshavjee S, 2006. Structural violence and clinical medicine. PLoS Med 3, e449. [PubMed: 17076568]

Feagin J, Bennefield Z, 2014. Systemic racism and US health care. Social science & medicine 103, 7–14. [PubMed: 24507906]

Fisher-Borne M, Cain JM, Martin SL, 2015. From mastery to accountability: Cultural humility as an alternative to cultural competence. Social Work Education 34, 165–181.

Galtung J, 1969. Violence, peace, and peace research. Journal of peace research 6, 167–191.

Good BJ, 1993. Medicine, Rationality and Experience, Medicine, Rationality and Experience. Cambridge University Press. 10.1017/cbo9780511811029

Graham S, 2010. Disrupted cities: When infrastructure fails. Routledge.

Green K, Zook M, 2019. When Talking About Social Determinants, Precision Matters. Health Affairs Blog.

Hansen H, Braslow J, Rohrbaugh RM, 2018. From cultural to structural competency-training psychiatry residents to act on social determinants of health and institutional racism. JAMA Psychiatry 75, 117–118. 10.1001/jamapsychiatry.2017.3894 [PubMed: 29261827]

Jenkins JH, Jenkins JD, Barrett RJ, 2004. Schizophrenia, culture, and subjectivity: The edge of experience. Cambridge University Press.

Jones CP, Jones CY, Perry GS, Barlcay G, Jones CA, 2009. Addressing the Social Determinants of Children's Health: A Cliff Analogy. Journal of Health Care for the Poor and Underserved 20, 1–12. 10.1353/hpu.0.0228

Kasper J, Greene JA, Farmer PE, Jones DS, 2016. All Health Is Global Health, All Medicine Is Social Medicine: Integrating the Social Sciences Into the Preclinical Curriculum. Academic Medicine 91, 628–632. 10.1097/ACM.0000000000001054 [PubMed: 26703416]

Katz J, 2002. The silent world of doctor and patient. JHU Press.

Kaufman SR, 2015. Ordinary medicine: extraordinary treatments, longer lives, and where to draw the line. Duke University Press.

Kaufman SR, Shim JK, Russ AJ, 2006. Old age, life extension, and the character of medical choice. J Gerontol B Psychol Sci Soc Sci 61, S175–184. 10.1093/geronb/61.4.s175 [PubMed: 16855038]

Kirmayer LJ, 2012. Rethinking cultural competence. Transcult Psychiatry 49, 149–164. 10.1177/1363461512444673 [PubMed: 22508634]

Kirmayer LJ, Kronick R, Rousseau C, 2018. Advocacy as key to structural competency in psychiatry. JAMA Psychiatry 75, 119–120. 10.1001/jamapsychiatry.2017.3897 [PubMed: 29261839]

Kleinman A, 2011. The divided self, hidden values, and moral sensibility in medicine. The Lancet 377, 804–805. 10.1016/S0140-6736(11)60295-X

Kleinman A, Benson P, 2006. Anthropology in the Clinic: The Problem of Cultural Competency and How to Fix It. PLOS Med 3, e294. 10.1371/journal.pmed.0030294 [PubMed: 17076546]

Kleinman A, Eisenberg L, Good B, 1978. Culture, Illness, and Care. Ann Intern Med 88, 251–258. 10.7326/0003-4819-88-2-251 [PubMed: 626456]

Lemke JL, 2000. Across the Scales of Time: Artifacts, Activities, and Meanings in Ecosocial Systems. Mind, Culture, and Activity 7, 273–290. 10.1207/S15327884MCA0704_03

Lomas J, 1998. Social capital and health: Implications for public health and epidemiology. Social Science & Medicine 47, 1181–1188. 10.1016/S0277-9536(98)00190-7 [PubMed: 9783861]

MacQueen KM, McLellan E, Kay K, Milstein B, 1998. Codebook Development for Team-Based Qualitative Analysis. Field Methods 10, 31–36. 10.1177/1525822X980100020301

Metzl JM, 2012. Structural competency. American Quarterly 64, 213–218. 10.1353/aq.2012.0017

Metzl JM, Hansen H, 2014. Structural competency: Theorizing a new medical engagement with stigma and inequality. Soc Sci Med 103, 126–133. 10.1016/j.socscimed.2013.06.032 [PubMed: 24507917]

Mol A, 2008. The Logic of Care: Health and the Problem of Patient Choice, 1 edition, ed. Routledge, London ; New York.

Neff J, Holmes SM, Knight KR, Strong S, Thompson-Lastad A, McGuinness C, Duncan L, Saxena N, Harvey MJ, Langford A, Carey-Simms KL, Minahan SN, Satterwhite S, Ruppel C, Lee S, Walkover L, De Avila J, Lewis B, Matthews J, Nelson N, 2020. Structural Competency: Curriculum for Medical Students, Residents, and Interprofessional Teams on the Structural Factors That Produce Health Disparities. MedEdPORTAL : the journal of teaching and learning resources 16, 10888–10888. 10.15766/mep_2374-8265.10888 [PubMed: 32342010]

Neff J, Knight KR, Satterwhite S, Nelson N, Matthews J, Holmes SM, 2017. Teaching Structure: A Qualitative Evaluation of a Structural Competency Training for Resident Physicians. Journal of General Internal Medicine 32, 430–433. 10.1007/s11606-016-3924-7 [PubMed: 27896692]

Ofri D, 2017. What patients say, what doctors hear. Beacon Press.

Papps E, Ramsden I, 1996. Cultural Safety in Nursing: the New Zealand Experience. International Journal for Quality in Health Care 8, 491–497. 10.1093/intqhc/8.5.491 [PubMed: 9117203]

Pilnick A, Dingwall R, 2011. On the remarkable persistence of asymmetry in doctor/patient interaction: a critical review. Soc Sci Med 72, 1374–1382. 10.1016/j.socscimed.2011.02.033 [PubMed: 21454003]

Rose DJ, 2011. Captive audience? Strategies for acquiring food in two Detroit neighborhoods. Qualitative health research 21, 642–651. [PubMed: 21041517]

Scambler G, 2006. Sociology, social structure and health-related stigma. Psychology, Health & Medicine 11, 288–295. 10.1080/13548500600595103

Schneider M, 2012. Structural Competency: Framing a New Conversation in Institutional Inequalities and Sickness. Somatosphere: Science, Medicine and Anthropology 1–7.

Swartz D, 1998. Culture and Power: the Sociology of Pierre Bourdieu. University of Chicago Press, Chicago.

Swinglehurst D, Roberts C, Li S, Weber O, Singy P, 2014. Beyond the ‘dyad’: a qualitative re-evaluation of the changing clinical consultation. BMJ Open 4, e006017. 10.1136/bmjopen-2014-006017

Taylor JS, 2003. Confronting “Culture” in Medicine’s “Culture of No Culture.” Academic Medicine 78.

Taylor JS, Wendland C, 2014. The hidden curriculum in Medicine’s" culture of no culture. The Hidden Curriculum in Health Professional Education. London: Dartmouth 53–62.

Tervalon M, Murray-García J, 1998. Cultural humility versus cultural competence: A critical distinction in defining physician training outcomes in multicultural education. Journal of Health Care for the Poor and Underserved 9, 117–125. 10.1353/hpu.2010.0233 [PubMed: 10073197]

Waitzkin H, 1991. The politics of medical encounters: How patients and doctors deal with social problems. Yale University Press.

Weiner SJ, 2004. Contextualizing medical decisions to individualize care: lessons from the qualitative sciences. J Gen Intern Med 19, 281–285. 10.1111/j.1525-1497.2004.30261.x [PubMed: 15009785]

Wortham S, 2012. Beyond Macro and Micro in the Linguistic Anthropology of Education. Anthropology & Education Quarterly 43, 128–137. 10.1111/j.1548-1492.2012.01165.x

Yates-Doerr E, 2020. Reworking the Social Determinants of Health: Responding to Material-Semiotic Indeterminacy in Public Health Interventions. Medical Anthropology Quarterly 34, 378–397. 10.1111/maq.12586 [PubMed: 32592209]

Research Highlights:

- Ambiguity of “structure” and “structural competency” hinders applicability
- Emphasis on “structure” may unintentionally essentialize marginalized patients
- Trainees’ affective responses are key to addressing societal factors in the clinic
- Humility and self-reflection helped trainees better address “structure”

Table 1:

Demographics of Study Participants

Role:	
First year medical student (S*)	7
Upper-level medical student facilitator (SF*)	7
Physician facilitator (F*)	5
Specialty (if physician facilitator)	
Internal Medicine	1
Surgery	1
Pediatrics	3
Race/Ethnicity	
White, Non-Hispanic	11
Black, Non- Hispanic	2
White, Hispanic	4
Asian	2
Gender	
Men	9
Women	10
Non-binary	0