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Teaching Structure: Lessons Learned From Curricular Innovations in Structural Competency

By

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A thesis submitted in partial satisfaction of the requirements for the degree of

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Committee in Charge:

Professor Seth M. Holmes, Chair Professor Jodi Halpern Professor Nancy Scheper-Hughes

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This thesis is dedicated to

the members of the medical education section of the

Critical Social Medicine Working Group,

without whom none of this would have happened

—nor been nearly so much fun.

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LITERATURE REVIEW: THE THEORETICAL BASES OF STRUCTURAL COMPETENCY

Reintegrating Social Medicine into Clinical Training

If medicine is to fulfill her great task, then she must enter the political and social life. Do we not always find the diseases of the populace traceable to defects in society?

Rudolph Virchow, 1848

Integrating social context into the practice of medicine is not a new idea, as Virchow's quote above makes clear (Virchow, 2006). "Social medicine," as this effort is sometimes called, seeks to direct the attention of modern medical providers beyond the narrowly biomedical to account for the social, political, and economic factors that influence health and healthcare. Since Virchow's time, the influence of social medicine has waxed and waned. This paper engages with a recently emerging effort called "structural competency" that seeks to re-introduce the core emphases of social medicine into mainstream medical training and practice.

Research today shows more clearly than ever before the extent to which health is determined by social factors. For instance, social epidemiology has demonstrated that incidence of diseases from heart disease to cancer are inversely proportional to class standing (Marmot, 2005), while epigenetics research has found a possible mechanism for this, showing that high-stress environments can increase the likelihood of disease for generations (Johnstone & Baylin, 2010). Since the 2002 Institute of Medicine report titled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, there has been increased awareness and much discussion within the American medical community about our nation's health disparities (Jenks, 2011; Smedley, Stith, & Nelson, 2003). By and large, however, clinical practice and medical education in the United States have not adapted to account for the influence of these extra-clinical determinants of health.

Reflecting tendencies within American society more broadly, the focus of clinical medicine is often highly individualized, focusing primarily on the biology and behaviors of individual patients (S. M. Holmes, 2012; Wear & Kuczewski, 2008). In response, scholars engaged with medical practice from social science perspectives have proposed the introduction of structural competency into modern medical education. The intent of structural competency is to balance this individualist approach by highlighting the social, political, and economic context in which individuals' biologies and behaviors play out—and, in the case of behaviors, are shaped (Metzl & Hansen, 2014).

If the role of physicians is to help patients to be healthy, then it is important to consider the upstream, extra-clinical factors that shape patient health long before the clinical encounter—and continue to exert this influence when patients return home. Similarly, it is important to consider the upstream political, economic, and social influences on the clinical encounter itself in order to improve how medicine is practiced. Yet medical

training today does not systematically train doctors to recognize or respond to such influences on health and healthcare.

We live in a moment in which social services are being dismantled even as our economic policies promote the rich getting richer and the poor poorer (Bradley & Taylor, 2013). Healthcare providers are uniquely positioned to call attention to the concrete, bodily harm that such political and economic influences have on society's most vulnerable people (Messac, Ciccarone, Draine, & Bourgois, 2013). Or, as Virchow famously put it, "The physicians are the natural attorneys of the poor, and social problems fall to a large extent within their jurisdiction" (Virchow, 2006). Structural competency is in part an effort to better realize this potential in the present day, by bringing important insights from the medical social sciences into the training of clinicians.

Reviewing the Literature

I am performing this literature review in preparation for the research project described in the subsequent essay of this thesis. For that project I will be investigating how to implement the developing notion of structural competency in a family medicine residency curriculum. Literature reviews generally point to the gaps in the literature, and to an extent that is what I attempt to do here. However, as structural competency is a new concept, under development only in the last few years, "gaps" may not be the appropriate metaphor—the undeveloped aspects of structural competency are far greater than the developed. Much of this review, therefore, will consist of (a) considering and tying together literature pertinent to structural competency, and (b) thinking through and clarifying what structural competency is and why it matters, in relationship to that literature. All of this will provide an important foundation for attempting to develop and implement a structural competency curriculum.

PART I: FRAMING A NEW COMPETENCY

Over the last few years, structural competency has been generating increasing interest in medical education circles. Structural competency curricula have been initiated in the medical schools of the University of Pennsylvania and Oregon Health Sciences University. Other medical schools and residency programs are similarly considering incorporating structural competency into their curricula.

What is structural competency? Its meaning is not obvious without context.

The term was coined by psychiatrist and American Studies scholar Jonathan Metzl in his 2009 book *The Protest Psychosis: How Schizophrenia Became a Black Disease* (Metzl, 2010). Its development over the past few years has been spearheaded by Metzl and Helena Hansen, a psychiatrist and social anthropologist, along with a network of social medicine scholars across the US. In addition to organizing two structural competency conferences, Metzl and Hansen have collaborated in designing the website

structuralcompetency.org, and they co-authored the paper that to date has provided the primary articulation of the concept. In this 2014 paper, "Structural competency: Theorizing a new medical engagement with stigma and inequality," Metzl and Hansen define structural competency as follows:

The trained ability to discern how... 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 & Hansen, 2014).

I will clarify and expand upon this definition in the following pages. In brief, structural competency is concerned with whether clinicians investigate, maintain awareness of, and respond to the influence of economic, political, and social forces—both on the health of their patients and on the clinical encounter. This effort seeks to translate and disseminate the theoretical insights of medical anthropology and related critical social sciences to current and future clinicians.

In order to achieve this end, structural competency calls for change in American medical education and training. Metzl and Hansen describe it as representing "a shift in medical education away from pedagogic approaches to … inequalities that emphasize crosscultural understandings of individual patients, toward attention to forces that influence health outcomes at levels above individual interactions" (Metzl & Hansen, 2014).

To understand what this means, it is worthwhile to take a step back and consider the specific meanings intended by the words "structural" and "competency" in this context. In the following section I will discuss the significance of these words, then describe what structural competency as a curricular-reform effort might more specifically entail.

The Meaning of "Structural"

The word structural in "structural competency" has the same basic meaning it has in the term "structural violence." In the pages prior to his proposing the concept of structural competency in *The Protest Psychosis*, Metzl describes the premises of structural violence, writing "Structural violence is the term often used to describe how even seemingly benevolent social institutions can dominate, oppress, or exploit minority populations" (Metzl, 2010,).

The lens of structural violence calls attention to the relationship between macro-level social, political, and economic influences and poor health and other forms of suffering at an individual level for marginalized people. Bourgois defines structural violence as the "Political-economic forces, international terms of trade, and unequal access to resources, services, rights, and security that limit life chances" (Bourgois, 2009).

Attributed by many to the work of Norwegian sociologist Johan Galtung in the late 1960s, structural violence was quickly taken up and applied more widely by liberation theologians (Bourgois, 2009). In recent decades, the concept has been popularized in medical anthropology and beyond by physician-anthropologist Paul Farmer. Farmer (Farmer, 2001) writes:

Neither culture nor pure individual will is at fault; rather, historically given (and often economically driven) processes and forces conspire to constrain individual agency. Structural violence is visited upon all those whose social status denies them access to the fruits of scientific and social progress (p. 79).

According to Farmer, the structural violence lens connects large-scale forces to the "death, injury, illness, subjugation, stigmatization, and even psychological terror" experienced by individuals in marginalized positions (Farmer, 2004).

The use of the word "violence" in structural violence highlights that unjust social, political, and economic structures ultimately result in physical, bodily harm—as well as psychological and social harm. As Bourgois and Scheper-Hughes (Scheper-Hughes & Bourgois, 2004) note:

Violence can never be understood solely in terms of its physicality—force, assault, or the infliction of pain—alone. Violence also includes assaults on personhood, dignity, sense of worth or value of the victim. The social and cultural dimensions of violence are what gives violence its power and meaning (p. 1).

From the vantage point of structural violence, the damaging individual effects (physical and otherwise) of these structures are not dissimilar from the effects of "event violence" or "episodic violence"—violence as it is colloquially used to refer to harm done to people with weapons or other forms of direct, interpersonal assault. In a sense, structural violence points to the way that social structures influence health, insofar as violence is thought of as that which damages health.

It is perhaps important to note that structural violence as a concept is not without its potential pitfalls—nor without detractors. While noting that "structural violence may be strategically useful as a rhetorical tool," Loïc Wacquant writes that Farmer's account of structural violence "conflates full-fledged domination with mere social disparity and then collapses forms of violence that need to be differentiated, such as physical, economic, political, and symbolic variants or those wielded by state, market, and other social entities" (Farmer, 2004). Wacquant here is responding to Farmer's proposal to deploy structural violence more broadly within anthropology, and his concern with structural violence is that it "threatens to stop inquiry just where it should begin," by collapsing rather than distinguishing and further exploring the varying above-described forms of violence.

Furthermore, the term structural is not always used entirely precisely in the literature. In one quote included above, Metzl and Hansen define structures as "forces that influence

health outcomes at levels above individual interactions." As observed by physician-philosopher Jodi Halpern (personal discussion), it may not make sense to define *structures* as *forces*. There seems to be a mixing of metaphors, and this may reflect an underlying conceptual ambiguity that could benefit from further theoretical development.

These potential limitations of structural violence may not be important for the purposes of structural competency. Perhaps the most important work done by the term structural in this context is inviting people to look beyond individualistic or cultural explanations of poor health outcomes, both of which I will discuss below. In a clinical setting, this frame can help providers to ask themselves what context beyond the individual or cultural might have contributed to the patient's ill health. In an urban underserved setting, this could mean not only thinking about so-called "food deserts" and unsafe neighborhoods, but also about the multiple factors that have brought these realities into being—for instance redlining and other forms of systemic racism (Coates, 2014). In other words, the concept may be an effective antidote to the obfuscation of social, political, and economic influences by individually and culturally-focused interpretations of health disparities. These modes will be discussed at greater length below.

Structural as a word also has certain benefits. Importantly for structural competency, it does not sound inflammatory or overtly political. This is helpful because it may be acceptable to audiences that would reject or be resistant to terms that more explicitly suggest or at least connote a political position (e.g. "radical," "emancipatory," "liberation," etc.).

Also important to structural competency, however, the word structural may be somewhat resistant to being stripped of political implications. This "watering down" has occurred for various other reform efforts. For instance, as will be described in the section on cultural competency below, much of the original impulse behind that effort was lost in its early years. And, as McKenna and Baer note, "In terms of public health or social medicine, much of the thunder of the political economy of health literature that began to emerge in the early 1970s... has been subtly co-opted in the guise of the social determinants of health discourse" (Guardian, Times, & Post, 2012). I will consider the critique of the social determinants of health at greater length below. For now it is sufficient to note that there will likely be some pressure on the concept, if it is taken up broadly, to shift in meaning toward already accepted (and therefore less threatening) lenses. My proposition is that the word "structural" implicitly points toward politics and economics, which can easily be lost in discussions of the extra-clinical influences on health.

For example, consider the way the word "upstream" has been claimed by some efforts to reform healthcare. There is a parable often told in public health circles, in which a group of people see a group of children floating down the river in distress. Some start rushing in to save the children by pulling them out, but the children keep coming, so some decide to build a raft to be more effective in saving all these children in the river. Others, however, recognize that the children must be coming from somewhere, and so head upstream to find why all these children are falling into the river in the first place. These individuals

recognize that there is a cause to this crisis, and seek to address the cause rather than just its effects. This story lends itself to a structural approach—responding to structural issues can easily be framed as an "upstream" intervention in health.

Physician Rishi Manchanda uses this parable and metaphor in his 2014 TED talk titled "What makes us get sick? Look upstream." This is a very popular video, with over 1.2 million views as of January 2016. In it Manchanda refers to himself as an "Upstreamist"—one of the doctors who is responding to the root causes of health issues (Manchanda, 2014). However, Manchanda's approach is distinct from that of structural competency. In his talk, he describes a patient he saw in his clinic in South Central Los Angeles who was suffering from chronic allergy symptoms. The example he provides of going upstream—to the root cause of the issue, he claims—involves his realizing that her symptoms were caused by mold in her house. He helps her address the mold in her home, and her symptoms improve. Such interventions are very encouraging, need to happen more broadly, and need to be an aspect of efforts around structural competency if this framework is to be effective.

In the talk, however, Manchanda does not acknowledge issues of inequality or injustice—issues of structures. Why did this woman in South Central LA have mold in her house in the first place, while other people do not? Manchanda does not indicate that there might be social, political, and economic causes further "upstream" of mold in an apartment. Thus "upstream medicine" can easily fall short of actually considering issues of power, economics, and other structural influences—as is the case in what is likely its most widely circulated explanation.

In this discussion of the concept of structure, it is worthwhile to introduce the notion of "structural vulnerability," which builds directly upon structural violence and may prove useful in the implementation of structural competency. Quesada, Hart, and Bourgois (Quesada, Hart, & Bourgois, 2012) write: "Individuals are structurally vulnerable when they are subject to structural violence in its broadest conceptualization. This includes the interface of their personal attributes—such as appearance, affect, cognitive status — with cultural values and institutional structures (p. 340)." Individuals subject to structural violence can be said to be structurally vulnerable—they are at risk of personal harm due to large-scale structural influences. This framing may be grammatically and conceptually useful in a clinical setting—structural vulnerability could be considered in parallel to other clinically-pertinent risk factors.

The potential usefulness of the structural vulnerability concept for structural competency is illustrated by the 2016 Quesada et al. article (under review): "Re-invigorating the social history: 'Structural vulnerability' as a tool for promoting structural competency in health care." This article proposes an expanded and more-structural social history, framed in terms of structural vulnerability. As the article notes, so-called social histories in current medical practice are too often behavioral at the expense of considering the social, focusing mainly on substance use rather than considerations such as financial status or food access. In the article the authors propose that training clinicians to take a more thorough social history is important part of bringing structural competency into clinical

practice, and they provide a checklist of questions to consider asking patients (Quesada, Holmes, Sue, & Bourgois, 2016).

The Meaning of "Competency"

One reason for the use of the word "competency" in "structural competency" is its use in "cultural competency." When Metzl first suggests the term "structural competency" in *The Protest Psychosis* (2010), it is in the context of a critique of the limitations and possible unintended consequences of cultural competency. I will discuss cultural competency and the framing of structural competency relative to it at greater length below—for now it will suffice to note that the existence of cultural competency as a term and as an entity in medical education is one major reason for the use of the word competency in structural competency.

The use of the word competency is also a reflection of the contemporary framing of medical education more generally. In recent years, "competency based medical education" (CBME) has become a guiding paradigm for the institutions that oversee medical education in the United States at the medical school and residency levelsnamely the American Association of Medical Colleges (AAMC) and the Accreditation Council for Graduate Medical Education (ACGME), respectively. Though it has gained traction especially in recent years, the literature framing CBME describes it as a gradual shift in thinking over several decades about how medical education should be organized and assessed (Frank et al., 2010). In this literature CBME is seen as a shift in emphasis from prior medical education models that heavily prioritized the acquisition of biomedical knowledge at the expense of training physicians-to-be in other elements necessary to become an effective healthcare provider, such as interpersonal communication or professionalism. CBME is also described as a shift toward emphasizing educational *outcomes*, from earlier educational paradigms that focused reform efforts primarily educational processes without necessarily evaluating the abilities gained by students. Thus the use of the term "competency" is meant to designate a shift in focus toward the skills that students or trainees develop.

In this context, the word "competency" is a useful way to frame curricular reform efforts. The hope with structural competency is that it will be widely taken up in medical curricula in the US and perhaps beyond. Given that medical education in the US and Canada is being framed in terms of the competencies that trainees must acquire in order to be effective practitioners, it makes sense to frame structural competency as such.

That said, there are drawbacks to the use of the word competency. As I describe below, its use within the context of cultural competency has been critiqued as potentially suggesting a false possibility of mastery of a discreet body of knowledge. In this vein, it would seem strange and perhaps presumptuous for an individual to be described as "structurally competent"—what could this mean? This seems to suggest having arrived at an endpoint that would be immodest to claim, and perhaps impossible to realize fully; it

connotes an outcome rather than a process. Yet the word "competency" inevitably invites this usage of its adjectival form.

Other words might more accurately describe the shift that structural competency seeks to help bring about. For instance, the terms "structurally engaged," "structurally attentive," "structurally responsive," or even "structurally conscientious" could reasonably and perhaps helpfully be used to describe people—in the affirmative or negative, i.e. she is or is not structurally attentive, or she is or is not structurally engaged. All suggest an orientation and a process rather than a discreet endpoint. Perhaps incorporating alternate terms in certain contexts could help alleviate some of these drawbacks—for instance, introducing the concepts "structurally engaged" or "structurally attentive" in teaching contexts while continuing to frame the larger effort as structural competency for the reasons described above.

The Components of Structural Competency

In their article defining structural competency (2014), Metzl and Hansen propose five "core structural competencies" that constitute structural competency more broadly. These are:

- 1. Recognizing the structures that shape clinical interactions
- 2. Developing an extra-clinical language of structure
- 3. Rearticulating "cultural" formulations in structural terms
- 4. Observing and imagining structural interventions
- 5. Developing structural humility

I will provide a basic explanation of each of these concepts, consider an alternative (but overlapping) conceptualization of the components structural competency, and attempt to synthesize these before moving into the literature that structural competency builds upon or challenges.

The first competency, recognizing the structures that shape clinical interactions, suggests that clinicians should be trained to recognize the ways that their experiences in the clinic are constrained and otherwise influenced by "economic, physical, and socio-political forces" (Metzl & Hansen, 2014, p. 128) For instance, a structural competency framework might encourage clinicians to consider how the constant presence of time pressure in their clinical encounters is shaped by hospital, insurance company, and government policies.

The second competency, developing an extra-clinical language of structure, argues for "infusing scholarship on the hierarchies, economies, and networks through which health and illness are produced and maintained" into medicine. Noting that, even as the literature on the effects of poverty and other social structures on individual health (epigenetics, heart disease outcomes, etc.) becomes increasingly sophisticated, the conceptualization of social structures and forces in these fields remains undeveloped. The

medical community does not as a whole share well-developed social analytical tools to think about and describe the structures that lead to those poor outcomes. This in turn, according to Metzl and Hansen, "flattens medical abilities to discuss the 'social' aspects of social determinants," rendering the social "a monolithic or immutable force that functions beyond the reach of medical imagination or expertise" (p. 129). Thus, Metzl and Hansen argue, better education in social analysis such as that found in medical anthropology and sociology would lead to more nuanced understandings of the social determinants of health among medical practitioners.

Competency three, rearticulating "cultural" presentations in structural terms, is founded upon a critique of the current role of cultural competency within medical education. In Metzl and Hansen's view, cultural difference is the primary lens currently offered to medical students for interpreting health disparities and issues that arise between doctor and patient in clinical encounters (such as failure to adhere to medication regimes). However, they argue, while culture has its place in explanatory models, it tends to be emphasized at the expense of consideration of structural factors that lead to both disparities and clinical challenges encountered by physicians. Thus culture ends up obscuring from view structural issues. And, much more than cultural explanations, awareness of structural influences on health may help point to potential solutions—and to the placing of responsibility where it is due, rather than blaming poor outcomes on the culture of people who are in fact victims of often unacknowledged structural inequalities.

The premise of the fourth competency, observing and imagining structural interventions, is that recognizing the structural determinants of health could lead to identifying structural solutions to the upstream causes of ill health. As Metzl and Hansen write, "Structures that shape health and illness are neither timeless nor immutable, but instead reflect specific financial, legislative, or indeed cultural decisions made at particular moments in time" (p. 130). In this section Metzl and Hansen describe several examples of such structural level interventions, from the work of physician-activist Jack Geiger in the 1960s to protesting medical debt to various forms of community-based participatory involvement.

Fifth, structural humility in Metzl and Hansen's framing suggests that even as providers learn about structural influences on health, they should remain humble and not assume that their interpretation of a given situation is definitive. Metzl and Hansen define structural humility as "the trained ability to recognize the limitations of structural competency." They further recommend that "practitioners of structural competency recognize that the skills they develop are the beginning points of conversations rather than endpoints" (p. 131). At a national conference of physician-scholars in April 2014, Helena Hansen offered a revised definition of structural humility, characterizing it terms of collaboration with communities in responding to harmful social structures—as opposed to providers thinking that they know better than patients and communities what structures are affecting them and what constitute appropriate responses.

Physician-anthropologist Seth Holmes and I have imagined a slightly different framing of the core elements of structural competency. We felt that it would be helpful to organize the core elements of structural competency as follows:

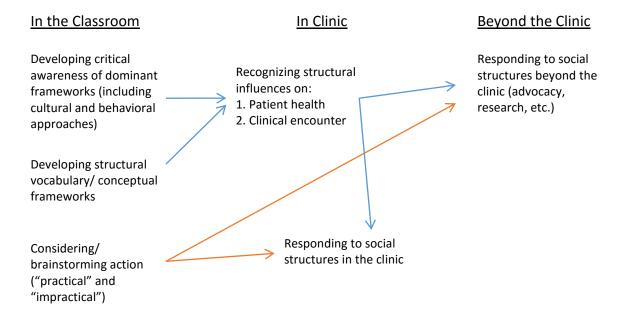
- 1. Recognizing the social structures that affect patients' health
- 2. Recognizing the social structures that affect the clinical encounter
- 3. Responding to social structures in the clinic
- 4. Responding to social structures outside the clinic
- 5. Incorporating structural humility into all of the above

This schema, while overlapping with Metzl and Hansen's, may be conceptually cleaner in that the components of its list are more equivalent items, focusing on clinicians' cognition and action. The items of Metzl and Hansen's list are more variable in focus, and are less clear about the contexts in which each is imagined to take place.

Number 2 in our list—recognizing the social structures that affect the clinical encounter—is the same as the first item of Metzl and Hansen's list (recognizing the structures that shape clinical interactions). Number 5 is structural humility in both lists. Number 4 in our list—responding to social structures outside the clinic—corresponds closely to the fourth item of Metzl and Hansen's list (observing and imagining structural interventions). In our formulation, the action described in numbers 3 and 4 perhaps depends on the recognition described in numbers 1 and 2 (one cannot act to address that which one does not see).

Numbers 2 and 3 of Metzl and Hansen's list are interwoven into our list. Their number 2—developing an extra-clinical language of structure—is essential for recognizing structural influence in the clinic as well as on patients' lives. Number 3—understanding how structural issues can be and are often misrecognized as cultural in origin—is an important component of this.

Combining our approach with that of Metzl and Hansen, we might visualize these components of structural competency for clinicians as follows:



In sum, the idea here is that providers will be able to recognize structural influences on patient health and the clinical encounter when they (a) develop a critical awareness of the hegemonic, taken-for-granted modes of interpreting health disparities—including but not limited to cultural and behavioral interpretations—and (b) gain a set of conceptual frames to recognize and describe structures. This recognition can be developed through classroom-based work. Once providers recognize such structural influences, they can begin to respond to these in and out of the clinic. We believe that the opportunity to brainstorm such responses will help providers to convert their recognition into action.

In the remainder of this review, I will focus mainly on the literature that provides the basis for the classroom-based learning proposed by structural competency—namely, the critique of dominant paradigms for understanding health disparities, and some of the alternative, structurally-focused frames that structural competency can offer. I will then consider how to approach designing and implementing curricular modules to facilitate participants' learning of these concepts.

PART II: DEVELOPING CRITICAL AWARENESS OF DOMINANT PARADIGMS

Beyond Behavioralism and the Naturalization of Inequality

An essential component of structural competency is developing providers' critical awareness of the often-subtle perfusion of individualistic, behaviorally-focused thinking throughout American society, including in the clinic.

In their article "Medical Students' Perceptions of the Poor: What Impact Can Medical Education Have?" Wear and Kuczewski (2008) argue that medical students' attitudes

towards the poor patients reflect American attitudes toward poverty generally. The authors review pertinent literature on attitudes towards poverty in the US, noting:

The majority of Americans believe that individualistic causes, such as lack of effort or laziness, drug use, or low intelligence, are more important than societal or structural ones, such as discrimination, low wages, or poor education. And, according to Bullock, the "myth of classlessness appears to be a central ideological tenet among most Americans," which is why we are more apt to blame individuals for their poverty rather than societal or structural causes (p. 640).

The authors go on to describe studies suggesting that, while many Americans recognize that structural obstacles to overcoming poverty do exist, they also believe that individual characteristics should be sufficient to overcome these barriers. This perspective "ultimately places the locus of control for poverty within the individual and makes poverty a personal failure in virtually every instance" (p. 641). Some of their sources suggest certain groups of people in the US are more likely than others to think individualistically about the causes of poverty—for instance whites and political conservatives. Wear and Kuczewski also report some evidence that, "medical students become more conservative as they advance through medical training." Something about becoming a doctor seems to push at least some people toward more conservative and individualistic interpretations of their patients.

The authors point to one possible factor that may account for this phenomenon. They cite the Institute of Medicine's influential 2002 report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, which observes, "Often the only aspects that students see of the communities in which they work are what produces the circumstances that bring individuals into the hospital, [such as] violence and drug abuse" (p. 640). Those who provide healthcare to poor communities but do not interact with those communities in other capacities occupy a potentially-distorting vantage point on the communities they serve.

This context may help explain why, among those taking the Implicit Association Test, people with MDs on average had a greater implicit bias than people with any other degree or professional training level—as reported by Chris Mooney in Mother Jones (November 2014). Whatever the cause of this reality, it is striking that the practitioners of medicine—often framed as a "caring profession"—were found to be more implicitly biased against African-Americans than those with JDs and MBAs as well as those without higher degrees.

Wear and Kuczewski point out an important and related fact: due to the location of teaching hospitals, medical trainees "learn medicine disproportionately on poor populations" (p. 639). Thus medical students with a variety of inclinations and motivations—not only those who have a mission to serve—are involved in the care of poor patients. This is one reason to provide structural competency training for all medical trainees—not only those who explicitly want to work in underserved communities.

Following these observations, Wear and Kuczewski call for medical education to "foster a more nuanced understanding of the causes and implications of poverty so that physicians may be more effective in working with patients who are poor." They continue: "Furthermore, we want medical professionals to feel a sense of duty to help those who are underserved and to be part of a profession that advocates [for] the health-related needs of the poor" (p. 642).

There may be a temptation to think that while all the above may be true for doctors nationally, doctors in the Bay Area or politically liberal doctors who work in primary care or especially doctors who have a sense of mission to work with the underserved already have a structural perspective—so structural competency isn't necessary for these populations.

However, Seth Holmes' ethnographic work in clinics serving migrant farmworkers (2013) suggests that not all doctors working in underserved settings already have structural awareness—not even if they have an explicit mission to serve vulnerable populations—and that the care they provide suffers as a result. The clinicians who Holmes interviews have varying and sometimes contradictory interpretations of the health or lack thereof of Mexican migrant farmworkers. Holmes observes that while their accounts are divergent from one another, in nearly all cases these clinicians locate the source of patients' ill-health not in social, political, or economic structures but rather in their patients' biology, behavior, and/or culture.

Holmes' enters these clinics as companion to the primary informants of his ethnographic work, undocumented indigenous Mexican migrant workers. This vantage allows Holmes to recognize structural factors at play that the clinicians overlook. For instance, Holmes recognizes that his informant who goes to the doctor with serious knee pain ends up with this injury due to factors such as the constant pressure to work faster, bent over, for grueling long hours on the farm. Underlying this is the constant threat of being fired combined with the lack of alternative job options to undocumented immigrants. Holmes also notes the role of upstream policies such as the North American Free Trade Agreement (NAFTA) as contributing factors to his informants' injuries, by virtue of forcing them to emigrate from their homes and accept jobs with dangerous working conditions in the first place. NAFTA had this effect because it allowed American corn made artificially cheap by subsidies—to flood Mexican markets, depriving Mexican corn farmers of their livelihood, Holmes' informants among them. Again, none of these proximal or distal structural factors are mentioned by most of the clinicians he interviews. Instead they focus primarily on behaviors and biology, saying for instance that the worker with the injured knee has been using improper posture while working—failing to recognize the impossibility of maintaining the recommended postural change under the working conditions faced by the patient.

As Holmes points out, the use of cultural and biological explanations results in an insidious blaming of patients and overlooking of structural influences on health—even among the best-intentioned providers. Holmes attributes this phenomenon in part to how physicians are trained. He writes:

Most of these clinicians have chosen their positions, feeling compassion and a desire to help underserved populations. Yet the lenses they are offered in medical training have been narrowly-focused, individualistic, and asocial. By and large, physicians in the U.S. are not trained to see the social determinants of health problems, nor to hear these factors when communicated by their patients.... Physicians today are taught to see risk behaviors in health—such as diet, sexual behaviors, and substance abuse.... However, the lenses of individual biology and individual risk behavior remain limited, excluding the political economic structures and institutional prejudices that shape much of sickness and health.

Thus, well-meaning and well-trained clinicians may inadvertently blame the patient—their biology or behavior—for their suffering. Even those clinicians aware of the social determinants of sickness may resort to biological and behavioral explanations.... Thus, the victim of social inequalities is blamed for her poor health and the social inequalities themselves are left unexamined and unchallenged. The most proximal determinants of sickness are left unseen and unchallenged such that biomedicine functions as a subtle and effective "anti-politics machine."

Holmes' work helps demonstrate why we cannot assume that either providers' good intentions or having a sense of a calling to serve poor communities constitute structural awareness. Formal training in social analysis is not incorporated consistently into the training of healthcare professionals in the US. If providers have never been meaningfully taught to recognize social, political, and economic influences on their patients' health, it is likely that their thinking will reflect the biological, behavioral, and cultural modes of analysis that their education and society more broadly has implicitly and sometimes explicitly provided them with.

Holmes' description of medicine as an "anti-politics machine" refers to James Ferguson's seminal work on development projects in Lesotho (James Ferguson, 1990). Ferguson argues that international development functions as an "anti-politics machine" in the sense that it frames concerns and issues with political origins as technical problems that can be addressed through improved technical solutions. According to Ferguson, this obscures the political roots of various issues connected to development.

The concept of an anti-politics machine is a useful one in conceptualizing structural competency, so it is worth going into a bit more detail on what Ferguson means by this. In his words,

A "development" project can effectively squash political challenges to the system not only through enhancing administrative power, but also by casting political questions of land, resources, jobs or wages as technical "problems" responsive to the technical "development" intervention. If the effects of a "development" project end up forming any kind of strategically coherent or intelligible whole, it is as a kind of "anti-politics" machine, which, on the model of the "antigravity" machine of science

fiction stories, seems to suspend "politics" from even the most sensitive political operations at the flick of a switch.

Such a result may be no part of the planners' intentions. It is not necessarily the consequence of any kind of conspiracy to aid capitalist exploitation by incorporating new territories into the world system or working against radical social change, or bribing national elites, or mystifying the real international relationships. The result can be accomplished, as it were, behind the backs of the most sincere participants. (J. Ferguson & Lohmann, 1994, p. 180-181)

Holmes argues that in the migrant health clinic the political factors that led to poor health for his informants are similarly obscured through providers' rhetorical framing of the causes of ill-health as cultural, biological, or behavioral—a framing that then gets passed from one provider to another through the medical record. Though the healthcare providers do not intend to do so—though it happens "behind their backs"—this approach nonetheless shifts focus away from root political causes.

Contrary to the supposition that working with underserved patients alone will make providers structurally competent, working in such settings may sometimes strengthen astructural modes of thinking. In her article "Learning the Moral Economy of Commodified Health Care: 'Community Education,' Failed Consumers, and the Shaping of Ethical Clinician-Citizens," Michele Rivkin-Fish (2011) shows that providers' exposure to poor patients not only does not necessarily lead to improvement in understanding of patients' context—it can actually reinforce the justification and acceptance of an unequal health system. Based on her observations and interviews of dental student volunteers in a free clinic, Rivkin-Fish argues that this reinforcement occurs in part through the "moral economy of commodified health care." Since the patients are not paying money, the students expect patients who they serve in the free clinic to repay them with the expression of gratitude for the services they receive—even when these services are often much inferior to services provided in paid settings. Indeed, many students express that they participate in these free clinics partly because they are able to attempt procedures that they are not yet permitted to undertake with other patients.

Rivkin-Fish argues that this combination of expecting patients to be grateful even while providing sub-standard care and gaining desired, potentially premature clinical experience is enabled by the hegemonic perception of healthcare as commodity—and the corresponding absence of attention to the root causes of the inequality that makes such clinics appear necessary in the first place. "You get what you pay for," states one of her informants, an assertion presented as self-evident and that no other students challenge. Because students lack frameworks to think outside of this dominant, commodity-based paradigm, patients are seen as deserving of quality dental care only to the extent they are able to pay for it—and the causes of inequality are ignored.

Thus this article helps show why working in underserved settings is not sufficient for developing a structurally contextualized approach in providers. The dominant ideologies

that practitioners carry with them will powerfully shape their perceptions of their experiences, such that they will tend to draw conclusions that justify rather than challenge the status quo. Rivkin-Fish concludes that this tendency might be counteracted through "curricula devoted to teaching a systematic analysis of the structural inequalities inherent in market-based health care" (Rivkin-Fish, 2011, p. 205).

These ethnographic examples from Holmes and Rivkin-Fish both can be thought of as examples of symbolic violence, as described by French sociologist Pierre Bourdieu (Wacquant, 2007). One of the central themes in Bourdieu's work is how systems of oppression are able to persist—and symbolic violence is a key part of his account of how this takes place. The essential notion is that social oppression is preserved through the perception of the status quo as appropriate and deserved. Those at the top are seen as deserving of their position at the top, and, especially, those at the bottom are seen to be at the bottom due to their own faults. This occurs, Bourdieu argues, because the social structures in which people develop shape the lenses through which they in turn perceive and evaluate the world. The resultant congruence of these lenses with the existing social world leads to the perception of the status quo as natural and, therefore, inevitable and (at least in some instances) universal.

Thus the status quo is defended throughout history through invocations of the natural order, framed as common sense. An example of symbolic violence in the present day provided by Bourdieu with protégé Loïc Wacquant is the blaming of women rape victims (by men and women alike) for their rape, by citing "deeply taken-for-granted... assumptions about masculinity and femininity" (Bourdieu & Wacquant, 2003). Similar examples abound around race, from describing African-Americans as unfit for freedom in opposition to emancipation to present day examples in which high rates of incarceration in African-American communities are seen as the result of issues located in the "black family" rather than policies (such as the War on Drugs) and social structures (racism) that systematically target young black men for arrest—despite, for instance, the fact that there are comparable rates of drug use across racial groups (Alexander, 2010).

In healthcare, we see symbolic violence when providers locate the causality for poor health outcomes in an individual's character, behaviors, biology, or culture without also accounting for larger, structural factors (culture I will look at in greater length in a moment). As discussed above, such misrecognition is probably more widespread and also more subtle than it might initially appear, even among those working in underserved settings, etc. In a sense, then, structural competency is necessary because inequality is made to seem natural—to providers and across society—through symbolic violence, as this naturalization renders the structures that maintain inequality and oppression difficult to recognize.

Beyond Cultural Competency

As noted in the discussion of the word "competency" above, since its coining in *The Protest Psychosis* structural competency has been framed in part as an effort to challenge

and augment cultural competency as it currently exists in medical education. This is also expressed in Metzl and Hansen's third sub-competency—rearticulating "cultural" formations in structural terms.

Cultural competency originally developed as part of an effort to respond to Western medical practitioners' blindness to their own culturally-specific perspectives and biases. As Arthur Kleinman and his co-authors wrote in 1978:

The biomedical view of clinical reality, held by modern health professionals in developing as well as developed countries, assumes that biologic concerns are more basic, "real," clinically significant, and interesting than psychologic and sociocultural issues.... Treatment oriented within this view emphasizes a technical "fix" rather than psychosocial management. It is less concerned with "meaning" than other forms of clinical care. It deals with the patient as a machine. Contrary to the usual belief of health professionals, this biomedical viewpoint is both culture-specific and value-laden: it is based upon particular Western explanatory models and value-orientations, which in turn provide a very special paradigm for how patients are regarded and treated. (A. Kleinman, Eisenberg, & Good, 1978)

To remedy this situation, in the same article Kleinman et al. go on to propose "a clinical strategy for applying social science concepts" (ibid, p. 66). This consists largely of the "explanatory models" approach, in which physicians attempt to learn how patients understand and experience their illness. To elicit these views from patients, the doctor is encouraged to ask a set of eight questions—questions that came to be referred to as the "Kleinman questions." Examples include "What do you think your sickness does to you? How does it work?" and "What do you fear most about your sickness?" (p. 66).

This notion was incorporated into medical education and practice under the label of "cultural competence"—an effort to prepare physicians to be competent when interacting cross-culturally. In many instances, cultural competency and the Kleinman questions have been introduced at medical schools via reading *The Spirit Catches You and You Fall Down*, a work of nonfiction by journalist Anne Fadiman (1997). In the book, Fadiman describes a breakdown in communication between doctors and a Hmong family that resulted in brain damage to the Hmong family's epileptic young daughter. Fadiman attributes this breakdown primarily to cultural misunderstanding, which she thinks could have been avoided if the doctors had approached cultural difference with greater sensitivity and sophistication. She points to Kleinman's explanatory models approach as the better alternative.

In practice, cultural competency has often taken a form quite different than what Kleinman intended—as Kleinman himself wrote in 2006 (Arthur Kleinman & Benson, 2006). In many instances, cultural competency has been taught as a list of essentializing traits about various ethnic groups—each presented as self-evidently meaningful and distinct categories, and each implicitly "other"—for medical practitioners to learn and apply. Angela Jenks calls this the "list of traits" approach to cultural competency (2011).

Melanie Tervalon powerfully and popularly advanced a critique of this reductive and stigmatizing approach to culture in the 1990s. An MD-MPH who had worked prior to medical school as an activist in West Oakland with Angela Davis among others, Tervalon proposed "cultural humility" as a better alternative to cultural competency as she saw it being taught. The basic notion is that, rather than approaching perceived cultural difference by attempting to master what Jenks describes as a list of traits, providers should ask patients about their backgrounds. Tervalon and Murray-Garcia (1998) write:

Only the patient is uniquely qualified to help the physician understand the intersection of race, ethnicity, religion, class, and so on in forming his (the patient's) identity and to clarify the relevance and impact of this intersection on the present illness or wellness experience.... Humility is a prerequisite in this process, as the physician relinquishes the role of expert to the patient, becoming the student of the patient with a conviction and explicit expression of the patient's potential to be a capable and full partner in the therapeutic alliance. (p. 121)

Jenks argues that, to a large extent, medical educators responsible for cultural competency curricula are aware of this and related critiques of the list of traits approach. Jenks tracks two potentially overlapping responses to this critique. First, some continue to use the list of traits, but first call attention to the issues inherent to this approach. However, Jenks argues, these caveats are not sufficient to avoid reinforcing stereotypes: participants in cultural competency curricula enter with well-developed, if often implicit, biases. Caveats are not sufficient to avoid reinforcing these biases through the stereotyping list of traits approach.

Second, many have made a shift away from list of traits models, toward what Jenks calls an "open-mindedness" approach. In Jenks' account, many of the points offered by "cultural humility" have been incorporated into current iterations of cultural competency. In these instances, "Providers are culturally competent when they recognize that differences exist, welcome more knowledge about these differences, and seek to treat each patient as an individual" (p. 229). While this may resolve some of the concerns about earlier iterations of cultural competency, Jenks points out that culture in this formulation still frames difference in a "decontextualized" and uncritical way, and focuses additional attention toward individual (vs. structural) understandings of difference. Describing the effects of the more recent framings of cultural competency, she writes:

Providers learn to recognize—and to some extent uncritically accept—individual differences without developing an understanding of the social and historical conditions in which these differences have been produced or currently operate. As a result, cultural competence education, while designed to address socially produced health disparities, can ultimately reinforce a depoliticized understanding of cultural difference (p. 212).

Thus, Jenks writes, the open-mindedness approach to cultural competency can serve as an "anti-politics machine" (see discussion above), concealing the political roots of social issues by directing attention to the individual.

Gregg and Saha, writing in 2006, come to similar conclusions. They observe that as cultural competency curricula have increasingly attempted to address racial disparities in the US, the models presented have increasingly tended to conflate race and culture. "This," they write, "leads to an inappropriate collapsing of many of the forces affecting racial and ethnic minority populations—such as poverty, violence, and racism—into the less threatening concept of culture." The authors note that, while cultural barriers are responsible for some health disparities, these are not the largest or most important causes of disparities. Thus framing racial issues as cultural "unjustly trivializes the larger problems of social disadvantage and deprivation." Gregg and Saha further argue that "by subsuming race under the rubric of culture, racism and discrimination become part of 'cultural differences' and are thereby more palatable and easier to ignore" (p. 544-545).

Citing Gregg and Saha, Jenks expands upon this point. Noting that students report conversations around culture to feel more comfortable than conversations around race, she writes:

Culture is a more comfortable topic than race in these conversations precisely because culture is presented as a neutral set of beliefs and practices that everyone has and that are therefore equivalent. Exploring cultural competence "hurts less" than exploring racism because it ultimately requires providers to recognize variation and difference but not inequality (p. 228).

Thus, even as cultural competency has absorbed and compensated for the "cultural humility" critique by emphasizing openness over the list of traits approach, it continues to obscure the social, economic, and political contexts and history that have shaped inequality in the first place.

All this is not to say that culture does not require consideration in the clinical encounter. Indeed culture remains important—some breakdowns in communication may be helpfully interpreted through a lens of cultural difference. Following preeminent cultural anthropologist Clifford Geertz's channeling of Max Weber, we can think of culture in this sense as describing the "webs of meaning" used by humans to make sense of the endless complexity of the world and lived experience (Geertz, 1973). Insofar as these webs vary in how they construct meaning, people coming from culturally different backgrounds may have differently inflected understandings of illness and health, respectful conduct, etc. that can and perhaps should inform treatment and communication in the clinic. The key point in the critique of cultural competency is that cultural modes of explaining poor health outcomes, breakdowns in clinical communication, etc. are often extended inappropriately—often in such a way that (a) stereotyping is reinforced—potentially leading to adverse clinical treatment for marginalized groups, and (b) structural influences are obfuscated. When this happens, we miss the opportunity to

appropriately and effectively respond to these issues, whether clinically, politically, or otherwise.

By focusing attention on the social, political, and economic causes of health disparities, structural competency offers a means to correct for this ongoing misapplication of the culture concept in medical education. I will now turn in greater detail to pedagogical considerations for incorporating this content into medical curricula.

PART III: COMPONENTS OF STRUCTURAL COMPETENCY CURRICULA

Structural competency is borne in part from an impulse to translate the insights of medical anthropology beyond the narrow academic circles in which it usually circulates—and into the realm of medicine, where many of these insights stand to be pertinent and concretely applicable. As noted at the start of this paper, there have been various efforts over the years to incorporate social considerations into clinical medicine. The impact of structural competency as such an effort will depend on a number of factors, a significant one being the way it is framed and implemented. It is essential that educators and trainees find structural competency curricula both palatable enough to institute and useful enough to justify continuing in subsequent years. In other words, the insights of the medical social sciences need to be translated in such a way as to be understandable, applicable, and sufficiently non-alienating to intended audiences.

In the following sections, I aim to think through some ways to accomplish these goals. As structural competency brings up pedagogical questions beyond the scope of most medical anthropological inquiry, I will draw from a range of disciplines to consider ways that structural competency might be framed. I am interested in both how to frame it pedagogically (how to teach it effectively) and strategically (how to convince programs—and perhaps eventually larger bodies such as the ACGME—to incorporate structural competency into their curricula). I will start with pedagogical approaches, drawing out key points from realms that offer insight pertinent to teaching structural competency.

Teaching Structural Competency: Lessons From Similar Efforts

Important lessons for structural competency curricula can be drawn from past efforts to implement cultural competency, efforts to teach similar themes in other contexts, and, of course, prior efforts to introduce discussions of inequality into medical education.

Willen et al. (2010) provide a helpful evaluation of a cultural competency curriculum in "Opening Up a Huge Can of Worms: Reflections on a 'Cultural Sensitivity' Course for Psychiatry Residents." The authors attempt to address a gap in the literature, writing "It is striking how little is known about the on-the-ground challenges, problems, and pitfalls that arise when clinician-educators attempt to render issues of racial/ethnic and cultural difference 'teachable' and 'learnable'" (p. 247). The authors interview the instructors and

most of the third year psychiatry residents who are participants in the course, and from these interviews they draw several conclusions about how to effectively approach teaching cultural competency and related topics.

Some of the issues discussed in the article may not apply to structural competency due to its difference from cultural competency. For instance, one issue that came up in the context of cultural competency training was "political correctness fatigue"—partly due to the fact that the majority of the residents participating in the course had been exposed to cultural competency (or "cultural sensitivity" or "diversity") trainings before. Because it is new and different in focus than cultural competency, at least at the outset structural competency may not be likely to inspire the same sense of fatigue or immediate disinterest. More importantly, perhaps, the authors note that one potential issue with cultural competency education is "disseminating cultural caricatures that many residents, as nuanced thinkers, will feel obligated to reject." As discussed above, part of the impetus for structural competency is moving beyond such stereotypes—so structural competency may be more resonant for some students (though structural stereotyping is no doubt possible, as will likely become apparent if structural competency becomes widely taken up). Moreover, the well-developed social analytical frames provided in a structural competency training may feel more rigorous to students than the frameworks taught in cultural competency curricula.

That said, many of the challenges to teaching cultural competency curricula described by Willen and colleagues are very relevant for structural competency. For instance, the authors find that appropriate timing in the course of resident training was important, particularly for an intervention that could be seen as extraneous to the core learning required of residents. The authors also suggest (a) employing case-based discussions rather than lectures, (b) avoiding taking for granted that participants lack exposure to the types of thinking presented in the class, and (c) making sure to incorporate the backgrounds and experience of the residents within a cohort into the curriculum and discussion. In the case of structural competency, this last point might involve asking participants to reflect upon and share ways they have witnessed or experienced issues such as structural violence in their own lives as well as the lives of their patients.

Additionally, the authors point to a tension in the difference between clinical thinking and social analytic thinking. While clinical reasoning consists of algorithmic thinking meant to reduce the complexity of individual cases, social science disciplines strive to embrace complexity and "break free from bounded diagnostic heuristics" (p. 250). In "En-case-ing the Patient: Disciplining Uncertainty in Medical Student Patient Presentations" (2011) Holmes and Ponte make a related point, arguing that the imperative to reduce complexity into the familiar case-presentation format teaches medical trainees to overlook patients' economic and social context.

Willen et al. also describe a potentially useful basic typology of attitudes among the resident-participants of the cultural sensitivity course. These include:

(1) The majority, for whom issues of culture in clinical practice are interesting in a general sense, (2) a smaller group of skeptics "who say this is 'p.c.' bunk," and (3) another small group who say, 'This is amazing; this is why I went into psychiatry" (p. 249).

It seems likely that participants in structural competency courses might follow a similar pattern. Preparing for students who will have different levels of interest—moderately interested, skeptical, and enthusiastic—can help guide thinking about how to present the material, and how it might be received by these different groups.

Significantly, one of the most significant barriers found by Willen et al. to the positive reception of the cultural competency course was the way that discussing topics such as race and inequality can trigger powerful emotional responses. The authors write:

Medical anthropological critiques [of cultural competency] tend to gloss over, or even completely ignore, the underlying emotional power associated with cultural and racial/ethnic difference in the contemporary United States. Given the tremendous affective potency of these issues, opening them up for critical engagement among U.S. clinical trainees—even with the best of intentions—will almost inevitably "open up a huge can of worms" (p. 251).

Structural competency stands to be similarly triggering of strong emotions. Indeed, in some cases structural competency could stir up *more* powerful emotional reactions in residents or medical students. Consider, for instance, Jenks' indictment of cultural competency as focusing on culture instead of race because it "hurts less" than confronting inequality. Structural competency proposes moving toward these more difficult, explicit discussions of inequality.

Willen et al. identify a few possible ways to better incorporate or respond to these issues. For one, they suggest creating more opportunity for students to reflect on their personal experiences, in part through providing "resident-trainees with a safe space in which to speak about complicated and conflictual issues, to experiment with possible responses, and to pursue a path toward personal and professional growth" (p. 252). Toward this end, they stress the importance of faculty response to "the resistance, critique, and heightened affect" of participants, possibly through providing trainings to prepare faculty for these challenges.

Wear and Aultman (2005) discuss the emotional responses triggered by teaching structural topics and engage the literature on student resistance in their article "The Limits of Narrative: Medical Student Resistance to Confronting Inequality and Oppression in Literature and Beyond." The authors describe the challenges they encountered while attempting to teach medical students about "the social, political, cultural, and economic conditions that affect health and well-being" through a one-month literature course. The authors write that they chose literature as a teaching method based on the premise that "positive identification with the fictional other can be linked to critical examination of the larger social structures that contribute to human suffering" (p.

1057). They assert, however, that the course was not very effective, in the context of "years of what we believed to be successful teaching in the various domains of literature and medicine." Their lack of success influencing student perspectives on structures leads them to reflect on student resistance. Much of this is likely to be pertinent to structural competency.

They define student resistance as "challenges to both course material and teachers themselves when either or both 'present gender, race, social class, and other dimensions of inequality as structural inequalities that relate to power differentials in society" (p. 1059). They follow Titus in classifying resistance according to three broad strategies: denying, discounting, and distancing. Denying corresponds somewhat to symbolic violence described above. The validity of critical perspectives is denied by blaming those who suffer from inequalities for their position, often through individualizing frames such as behavior, as discussed by Holmes as well as Wear and Kuczewki above.

Discounting involves writing off the content as irrelevant—a high risk for cultural and structural competency efforts alike. As various observers have noted, practitioners and trainees in the medical profession often have (structurally-determined) busy schedules and so are quick to resent any requirement that is perceived as a less-than-good use of their time. Initiatives such as structural competency that teach skills outside what is most often valued and rewarded in medicine are at a distinct risk for being discounted. Phenomena such as "colorblindness" can also be a form of discounting—students may claim that they don't need to learn about racism and similar concepts because they are not racist, etc. With structural competency in particular, students may think they already think structurally. This is especially true given that some in the medical profession may not respect the qualitatively-driven social analytic scholarship that is the foundation of structural competency—whether or not they are familiar with it.

Finally, distancing involves thinking that "social structures, institutions or other cultural phenomena lie outside their abilities or what they are being educated to do" (p. 1060). A distancing perspective might acknowledge the importance of structures in determining the ill-health of poor patients, but emphasize that doctors are already overworked—and really it's their job to address clinical disease, not its upstream causes.

These three categories of resistance—denying, discounting, and distancing—may prove useful to anticipate in framing structural competency, in curricula but also more generally. For instance, being explicit about how learning structural competency may be beneficial to clinicians could help diffuse efforts to write it off as irrelevant or outside the scope of their practice. I will discuss this further below.

Another challenge encountered by the authors was student denial of the premise of the course—that inequality is a major, present-day issue. Describing their effort to engage students about gender-related issues, they write:

One of the very assumptions that guided our selection of texts—that oppressive, discriminatory attitudes and structures based on gender continue to exist

everywhere—contradicted what many students brought to the classroom.... Because many students believe that gender equity *has* been achieved, it is easy for them to stay outside of an imaginative caring arena for the historically oppressive conditions of women's lives represented in texts, case studies, or other narratives (p. 1061).

Based on this and other, similar experiences in the course, Wear and Aultman conclude that one of the causes of resistance may have been their own failing to observe "one of the basic tenets of antiracist and antioppressive pedagogy: start from where the students are, not where their teachers are." Again, this is an important perspective to bear in mind while designing structural competency curricula.

In thinking through the emotional, defensive responses some students expressed during class discussions, Wear and Aultman draw upon the work of radical pedagogy scholar Megan Boler. They describe Boler's "pedagogy of discomfort," which, they write, "begins by inviting educators and students to engage in critical inquiry regarding values and cherished beliefs.... A central focus is to recognize how emotions define what one chooses to see, and conversely, not to see" (p. 1063).

Bearing in mind Willen et al.'s observation that medical anthropological critiques tend to ignore "the underlying emotional power associated with cultural and racial/ethnic difference in the contemporary United States" (described above), Boler's attention to the role of emotions in student receptivity of critical perspectives offers a potentially important complementary perspective for an effort that aims to translate medical anthropological perspectives to a wider (and perhaps more staunchly "mainstream") audience.

In her work, Boler tracks how hegemonic beliefs manifest in emotional responses and how this connects to student resistance. In her essay "Teaching for Hope" (2003), she writes:

A pedagogy of discomfort recognizes and problematizes the deeply embedded emotional dimensions that frame and shape daily habits, routines, and unconscious complicity with hegemony. The purpose of attending to emotional habits as part of radical education is to draw attention to the ways in which we enact and embody dominant values and assumptions in our daily habits and routines....

The emotional fallout of hegemony for those who do social justice education is that we encounter individuals who are so deeply invested in the dominant cultural values that these values have defined their sense of identity, and to question these values feels emotionally like an annihilation of self. Thus one faces loud and vocal resistance to rethinking the world as it is hegemonically constructed (p. 119).

Building on this foundation, Boler identifies two approaches to help increase receptivity to educational efforts that challenge dominant paradigms. First, she argues for providing students a sense of hope by highlighting ways that they can use this critical perspective to begin addressing the issues described. In other words, educators should point toward

potential solutions—not only provide critique without discussing possibilities for positive change. This hope, argues Boler, may reduce the extent to which students feel overwhelmed by the "shattering" of their previously held view of the world.

Second, she stresses the importance of compassion for students who are having their worldviews challenged. While this point may initially seem trite, I would argue that it is a helpful suggestion to keep in mind in framing structural competency. In my anecdotal experience, in many instances people with critical perspectives are judgmental and dismissive of those who do not already share their views. Such a response is understandable given the frustration of encountering potentially offensive or oppressive hegemonic views over and over again. However, if the facilitator of a structural competency course takes this approach, it is likely to trigger defensiveness rather than facilitate openness to new thoughts or understanding in participants.

Empathy: Useful Insights and Possible Framing for Structural Competency

All of the above evaluations and discussions of efforts to teach content similar to structural competency point to students' emotional experience as one of the most important factors influencing success or failure. This brings up questions about how to present this material so that students might adopt it into their worldview, clinical practice, and, hopefully, beyond into the realm of advocacy and activism. Above, Boler and others present some potentially useful pedagogical guidelines for teaching this sort of material so as to be more effective in light of the kinds of emotional resistance commonly observed in students.

The literature on empathy in healthcare offers additional insight into how medical trainees might take up and apply the information presented in structural competency curricula. This topic is beyond the scope of what I can adequately discuss in this literature review. I will, however, list a few pertinent points:

First, having empathy for others (as defined and measured in these studies) is associated with acting to help them—so something like empathy may be a necessary (if likely not sufficient) condition for acting in solidarity with patients, whether in a clinical capacity or beyond (Batson et al., 1997; Batson, Chang, Orr, & Rowland, 2002).

Second, responses to the suffering of others (i.e. empathy or lack thereof) are influenced by cognitive processes—so understanding patient social/structural context could help build empathy (which, again, makes helping action more likely) (Lamm, Batson, & Decety, 2007; Zaki & Ochsner, 2012).

Third, excessive levels of sympathetic distress are inversely associated with empathy—so structural competency may benefit from considering how to walk the line of presenting this material without overwhelming students; Boler's suggestion to provide hope by pointing out paths toward change may help in this regard (Lamm et al., 2007).

Fourth, perhaps more than anything else, stress blocks empathy and "helping responses"—so if students are stressed out they may struggle to meaningfully implement what they learn from a structural competency curriculum (Darley & Batson, 1973). Along these lines, if incorporating structural competency into a program increases student stress (by increasing the number of things they are expected to do, by making them feel personally threatened, or for other reasons) without providing subjective benefits, it is unlikely to be especially effective or well received

It is not clear how a more contextualized, structural understanding of patient health will tend to affect provider sympathetic response to witnessing difficult circumstances in the clinic. I suspect, however, that a structural perspective may help cultivate providers' empathy for vulnerable patients. For instance, would it be more or less distressing to see a homeless heroin addict return to the ED numerous times if (a) the provider interprets this through an individualistic, behavioral framework, or (b) the provider interprets this through a structural framework? In the former the provider will likely (implicitly or explicitly) place the onus for this outcome on the patient and their individual choices or moral character. In the latter, considering the social, economic, and political factors that have led to this outcome may point toward possible solutions—a way forward, if not an easy one.

My suspicion could be mistaken. Will pointing to constructive ways to respond to these situations improve provider morale by reducing a sense of impotence or hopelessness—or just cause more stress because it suggests there is another task they should do? Will (as I imagine to be the case) a structural approach decrease discouragement by perhaps helping providers to see that their patients are engaging in "unhealthy behaviors" not because they "don't care" about their health (or other reductive explanations)? Or is it protective to distance oneself from such harsh and unfair inequality—such that thinking more structurally will cause greater sympathetic distress than thinking behaviorally?

Also beyond the scope of this lit review is considering the many ways that a structural lens is missing from the empathy research, and could provide a needed correction to a field that has tended to ignore how factors such as class impact patient-doctor interactions (Hojat, 2009). Lenses that highlight how inequality is naturalized, such as symbolic violence, could be especially helpful in this regard.

Having briefly noted the ways that the empathy literature could be conceptually helpful in implementing structural competency curricula, I want to take a moment before wrapping up to also point to some of the benefits that empathy could provide structural competency as an effort—if structural competency were shown to improve empathy for underserved patients.

Particularly with support from fMRI neuroscience research in recent years (Zaki & Ochsner, 2012), provider empathy is increasingly seen as essential to effective medical practice (Riess, Kelley, Bailey, Dunn, & Phillips, 2012). Correspondingly, promoting empathy in medical students and residents is getting increasing recognition as an important area for improvement in medical education (ibid). In the literature, empathy is

described as good for patients—leading not only to greater patient satisfaction but also improved patient health outcomes—and also good for providers—leading to higher job satisfaction and lower rates of burnout (ibid). This last point about burnout has gained particular attention amidst publicity about the high rates of physician burnout. There have not, however, been trainings developed to date that focus specifically on improving provider empathy for underserved patients. This represents an opportunity for structural competency to claim this space and potentially gain traction with a wider audience in doing so.

This would follow the approach advocated by Bourgois and his co-authors in "The good-enough science-and-politics of anthropological collaboration with evidence-based clinical research: Four ethnographic case studies" (2013), who argue that ethnographic insights are taken up more broadly when reinforced by more quantitative data. They write, "When standing alone, ethnographic data and critical theoretical analysis have little credibility in larger policy debates and appear to be politically biased" (p. 184). The same issues are sure to come up in the context of reforming medical education to include medical anthropological perspectives. Indeed, in some sense structural competency is inherently political, so there is great risk it will be dismissed as "politically biased."

The authors note, however, that there are opportunities presented in the credibility garnered via corroboration from more quantitative approaches:

When brought into collaborative dialog with quantitative health and social services data, however, they [ethnographic data and critical theoretical analysis] achieve a much wider political reach. Ironically, it is precisely the failure to recognize social context and politics on the part of the clinical gaze, and the experimental quantitative research model that opens a creative political space for the delivery of valuable resources to the poor through the logics of best-clinical practices (p. 184).

As an effort that is fundamentally political and rooted in ethnographic data and critical theoretical analysis, structural competency would do well to heed this insight as it proceeds. Empathy—with quantitative research backing it up—offers a potential opportunity for structural competency to bridge this gap. That is, if structural competency can be shown to improve empathy, by extension it will also be connected with improving patient outcomes and helping prevent provider burnout. These are highly compelling outcomes as seen "through the logics of best-clinical practices"—such that the implicit politics of structural competency could be made less likely to become a sticking point.

Of course, this all depends on the link between structural competency and empathy being successfully made, a connection that requires empirical investigation.

Conclusion

In this literature review, I have described the origins of structural competency—including the significance of the words "structural" and "competency" as well as two ways of

conceiving of the components that constitute it. I have looked at the dominant, often implicit modes of analysis that structural competency is responding to—including behavioral frameworks and cultural competency. And, finally, I examined literature that can inform the framing and teaching of cultural competency, including the potential benefit of exploring the connections of structural competency to empathy.

In paper two I will evaluate a pilot effort to teach structural competency to residents in a short training session.

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PAPER 2: CURRICULAR INNOVATIONS AND EVALUATION

INTRODUCTION

Medical educators today face both a challenge and an opportunity. Despite a large body of evidence showing that social structures are among the most fundamental determinants of health, ¹⁻⁵ there is no well-established paradigm for integrating this information into medical training and practice. In response, clinicians and scholars around the country have been collaborating to develop a model for teaching medical trainees to recognize the relationships between social structures and health outcomes—and incorporate this recognition into their clinical practice. This article describes two interrelated efforts to develop such a pedagogic approach, using "structural competency" as an organizing principle.

Structural competency proposes "a shift in medical education…toward attention to forces that influence health outcomes at levels above individual interactions." (p.126-27) "Structures" or "social structures" in this sense refer to the policies, economic systems, and other institutions (judicial system, schools, etc.) that have produced and maintain modern social inequities as well as health disparities, often along the lines of social categories such as race, class, gender, and sexuality. Though articulating the relationship between macrosocial structures and health is not novel, 7-10 the systematic inclusion of such frameworks in U.S. medical curricula would be.

Currently, health disparities are most often discussed in medical education through cultural competency curricula. ¹¹⁻¹³ Implemented thoughtfully, cultural competency (or cultural humility) can promote trainees' respect for cultural difference and their awareness of the cultural specificity of their own beliefs and values. ^{14,15} These frameworks are important, but they are not sufficient for addressing the social, political, and economic roots of health disparities. ^{3,11,12,16} As Gregg and Saha note, approaching disparities through a cultural lens too often "leads to an inappropriate collapsing of many of the forces affecting racial and ethnic minority populations—such as poverty, violence, and racism—into the less threatening concept of culture." ^{11(p,543)}

Structural competency proposes to address this by training physicians and other healthcare professionals to recognize and respond to illness and health as the downstream effects of broad social, political, and economic structures.⁶ This approach builds on an understanding of the social determinants of health, as articulated by social epidemiologists such as Syme,¹⁷ Marmot¹⁶ and Krieger.^{3,18} Structural competency explicitly encourages trainees to think critically about the macrosocial structures that create the inequality underlying health disparities—what could be termed the structural determinants of the social determinants of health.

Such recognition is necessary if the roots of health disparities are to be addressed, and it has implications for clinical practice. 19-23 Medical educators are beginning to recognize the necessity of incorporating the social sciences throughout medical training. 24 Within the context of competency-based medical education, 25 the term structural "competency" rather than structural "awareness" or "analysis" urges its systematic inclusion in all levels of medical training. How best to integrate such material into medical curricula is not yet clear. 26

To begin developing and testing pedagogical formats, the author worked with professors and a group called the Critical Social Medicine Working Group to design, implement, and evaluate two pilot programs: (1) an interdisciplinary seminar in structural competency for medical and graduate students and (2) an introductory structural competency training designed for medical trainees as well as faculty. This paper describes these efforts and the lessons learned about how structural competency might be effectively translated into undergraduate and graduate medical curricula.

INTERDISCIPLINARY STRUCTURAL COMPETENCY SEMINAR

Design, Implementation, and Evaluation

Developed by the author with professors Seth Holmes (UC Berkeley) and Kelly Knight (UCSF) and taught by professors Holmes and Knight, the seminar was offered at the UC Berkeley School of Public Health and UCSF Department of Anthropology, History, and Social Medicine in Spring 2015. The seminar consisted of an interdisciplinary group of 17 students, including 8 medical students in the UC Berkeley-UCSF Joint Medical Program, 3 clinician-anthropologists in-training, and graduate students in medical anthropology, sociology, city planning, and public health.

Students read both social theory and case studies in topics ranging from healthcare provision in rural and urban settings to critiques of health information technology and service learning among health professionals ^{19,30-36} (see <u>appendix A</u> for syllabus). Students also engaged in ethnographic clinical observations and structural competency curriculum design projects.

The goals of the seminar were twofold: (1) to train students in structural competency, and (2) to identify concepts and cases that would resonate with medical trainees through the course's intensive reading and discussion-based format. These insights from the seminar helped shape the content of the training, which occurred the summer after the seminar. The seminar had two evaluations: standard course evaluations and an optional, open-ended series of short essay questions developed by the professors with MD-anthropology PhD student Shannon Satterwhite.

Findings

Social theory builds "vocabulary and analytic frameworks"

Seminar students found many of the social theory concepts taught in the course useful (see <u>table 1</u>). As one student commented, "I built more vocabulary and analytic frameworks that allow me to better characterize structural factors and discuss how they affect health." Reflecting the duration and depth of the seminar, another student commented: "[I learned to] build a historical and theoretical foundation for tracing and understanding how structural vulnerability has shaped morbidity and mortality outcomes for diverse populations in distinct cultural, political, and economical settings."

Building a framework and vocabulary

"I built more vocabulary and analytic frameworks that allow me to better characterize structural factors and discuss how they affect health."

"[I learned to] build a historical and theoretical foundation for tracing and understanding how structural vulnerability has shaped morbidity and mortality outcomes for diverse populations in distinct cultural, political, and economical settings."

Unique aspects of structural competency

"Looked at the broad structural underpinnings for social injustice."

"The honesty within which disadvantage was discussed and made visible."

Need for more concrete tools

"Depending on the goals of the course, I would incorporate some learning about concrete legal/economic structures in the U.S. that structurally-competent providers need know about."

The course was limited by:

"[Not] having/discussing more concrete ways to apply the information outside of class."

"Not feeling like we had enough time to define structural competence and make it concrete."

Emotions raised by the course

"[Students] have a variety of personal reactions to structural material; as it affects us all personally as well as being an intellectual interest... Some framework for this, and some space to discuss in class time, would have been so helpful."

"Hopelessness about where I will fit in as a health professional, and what I can do to actually address the structural factors we have identified. Enthusiasm about finding a group of people willing to think and talk about structural influences on medicine/health."

"I experienced a real sense of pleasure much of the time in being part of something positive, even though there's still so much work to do."

Table 1: Thematic summary of student reflections on the structural competency seminar

Practical and emotional responses

Several students requested an increased focus on practical strategies and constructive steps as well as more attention to the emotional experiences that arose from engaging with such material (table 1). One student stated, "We have a variety of personal reactions to structural material; as it affects us all personally as well as being an intellectual interest... Some framework for this, and some space to discuss in class time, would have been so helpful." Another student wrote that feelings of "Hopelessness about where I will fit in as a health professional, and what I can do to actually address the structural factors we have identified" coexisted with "enthusiasm about finding a group of people willing to think and talk about structural influences on medicine/health."

In sum, student evaluations highlighted the usefulness of the theoretical frameworks and vocabulary they gained, the importance of time and space for reflection alongside discussion of concepts, and the desire among students for concrete ways to respond to the effects of harmful social structures in the lives of patients.

THE STRUCTURAL COMPETENCY TRAINING

Design and Implementation

The structural competency training was designed to fit into the busy existing curricula of medical schools or residency programs as a stand-alone session or, ideally, as the first session of a longitudinal curricular element. The author developed this collaboratively with UC Berkeley's Critical Social Medicine Working Group, composed of physician-educators, medical anthropologists, nurses, health administrators, clergy, health activists, and graduate and professional students in several disciplines.

The group was invited to conduct a pilot of the training by the faculty of an academically-affiliated family medicine program that provides safety-net primary care for patients living in both rural and semi-urban settings. The pilot was implemented in June 2015 with the program's cohort of 12 first-year residents and—in order to reinforce this framework in ongoing clinical training—the program's core faculty. The three-hour resident training took place during a two-week didactic block focused on the social aspects of medicine and consisted of participatory, didactic, and reflective components divided into three modules reflecting the learning objectives listed above (See table 2 for the basic layout of the training). The faculty training was abbreviated to fit the available two-hour faculty development timeslot. Sessions were cofacilitated by physician-anthropologist Seth Holmes (UC Berkeley), pediatrician Jenifer Matthews (UCSF Benioff Children's Hospital Oakland), internist Nick Nelson (Highland Hospital, Oakland) and medical anthropologist Adrienne Pine (American University).

Evaluation

At both resident and faculty sessions, the author administered pre- and post-evaluation writtenresponse surveys. Pre-training surveys inquired about participants' clinical challenges, experiences of burnout, and familiarity with concepts related to structural competency. Posttraining surveys solicited participants' impressions of and feedback on the session and solicited their understanding of key concepts. All participants completed pre- and post-surveys. The author also conducted a focus group with seven of the twelve residents in the cohort (four of the remaining five were unable to attend due to clinical responsibilities or vacation).

Module 1: How structures affect patient health

- Patient case + discussion
- Didactic: Structural violence and naturalizing inequality, including implicit frameworks (individualism, culturalism)
- Resident case generation and discussion
- Didactic: Origins of structural competency
 - o Relationship of structural competency to cultural competency
 - Relationship of structural competency to SDOH

Module 2: How structures affect the clinical encounter

- Discussion + didactic: structures that affect the residents' practice
 - o 15-minute visits with patients \rightarrow profit driven healthcare
 - o Medical school debt
 - Structural influences on evidence-based medicine
 - Structural influences on diagnostic categories
- Resident case generation and discussion

Module 3: Brainstorming strategies to use in and beyond the clinic

- Resident brainstorm: "practical" and "impractical" solutions to structural barriers to health
- Strategies to use in the clinic
 - o More complete social history (not only health-related behaviors)
 - o Collaborating with community organizations
- Strategies to use beyond the clinic
 - o Community-level advocacy/ involvement/ organizing
 - o Policy advocacy
 - o Join/participate in healthcare-provider organizations that work on such issues collectively (PSR, PNHP, etc.)
 - o Conducting and publishing structurally-oriented research

Wrap Up

Table 2: Outline of Structural Competency Training

Findings

Influence on Residents: "Thinking about it constantly"

Feedback from residents and faculty immediately post-training was generally positive, in some cases strongly so (see <u>Table 3</u> and <u>Table 4</u>). More significantly, the training had a substantial influence on the residents and their clinical practice in the weeks after the training—more than we had expected from a single session. Residents reported thinking about and discussing the main training concepts (structural violence, structural vulnerability, naturalizing inequality) quite often— as one resident put it, "constantly, in almost every one of my clinics and almost every day in the hospital" (see <u>Table 5</u>). They also described discussing the concepts with their attending physicians and using the concepts in patient charts.

New Framework and Vocabulary

- "[The training provided] A toolbox of terms and clearer framework for discussing much of the frustration and injustice we witness daily."
- "I understood the concept of naturalizing inequality and had been noticing it in my work but this deepened the level at which I think about it and perceive it."
- "I learned to look at disease/illness in a different framework."

Clinical Relevance

- "Talking about how to address structural violence in the clinic was really helpful."
- "Case integration from our experience—this worked really well!"

Desire for more time and training

- "This was a fantastic program that I hope can be expanded. I'd love to see it turned into a multi-day workshop, but appreciate the accessibility of a 3-hour workshop."
- "Excellent training! Should be mandated for all medical students, residents, and practicing clinicians."

Need for more concrete next steps:

Residents recommended the following:

- "Concrete ways we can enact change."
- "Increasing time available for brainstorming projects to address issues raised in the session."
- "Flesh out more fully an exploration of what it looks like for individual docs to build careers doing clinical work and working on structural violence."

Relationships with patients and burnout*

- "Bearing witness, acknowledging, and removing blame away from the patient alone may offer a more therapeutic relationship."
- "Remembering the larger social context in which we practice medicine and the role I can play in helping to change it helps a lot."
- "If anything, this is a reminder of the enormities of the barriers to our patients accessing care/ our being able to care for them adequately, which doesn't really help with feeling burned out!"

Table 3. Thematic summary of resident post-training survey responses *Burnout was addressed directly in pre- and post-training surveys

Provider Communication: "Language and Frameworks"

Residents and faculty suggested that the efficacy of the training related to the descriptive and analytic power of the terms and concepts presented. As noted above, one of our primary goals was to equip participants with tools for recognizing and articulating the influences of clinically relevant macrosocial structures. As one attending wrote after the faculty session, "I have a language and frameworks to use in something I have been teaching to residents for years without the language." Residents also spoke to the impact of sharing this vocabulary with peers and faculty: "I want to emphasize how valuable I found it to have a shared vocabulary, to know [others] know the same terms that I do... it just lowers the barrier to having these conversations. It's a lot easier to talk about now."

New Framework and Vocabulary

- "I want this to be a lens I always think through."
- "Hearing the language and conceptual framework for things we see and face and struggle with all the time was helpful to be able to hopefully more deeply understand what is impacting our patients and communities and be able to help residents understand and address as well."
- "I already had a strong core understanding of the impact structural violence has on our patients' and community's health, but I didn't know where to go with it."

Relevance for teaching

- "I have a language and framework to use in something I have been teaching to residents for years without the language."
- "I loved hearing how others on faculty were thinking about these themes and how to apply them."

Need for more concrete tools or steps

- "More time problem-solving how to incorporate these issues into our daily work and teaching."
- "I need more hope. I need more action items to improve my care for the patient."
- "I am a very pragmatic person.... More cases—i.e. role play precepting while introducing structural competency."

Relationships with patients and burnout*

- "Realizing that I too have been exposed to structural violence through my career both directly and vicariously helps me to better understand why I feel this way."
- "It was an affirmation to not let the negative teachings of blaming the patient sneak into my thinking as well as an affirmation that taking the time to talk to patients about their social situation is an important use of time."
- "This may help me deepen my understanding of my patients, especially with the more 'challenging' patient interactions."

Table 4. Thematic summary of faculty responses to the training *Burnout was addressed directly in pre- and post-training surveys

Physician-Patient Relationship: "Helping to build a partnership"

One month after the training, several residents expressed that the training had influenced how they engage with patients. As one resident said, "I felt like it has been very effective in helping to build a partnership with patients. Acknowledging that the system is failing all of us... helps to build that relationship in a different way." This may be due in part to a change in the way residents think about their patients after the training. One of the residents framed this in terms of a shifting of blame: "The blame went from here's this patient who makes poor choices to here we are as a society failing huge portions of our population."

Influences on resident daily practice

- "I wrote structural violence in two patients' notes today."
- "I have been thinking about it constantly, in almost every one of my clinics and almost every day in the hospital and it came up in conversation with my co-residents who are also really passionate about it. It has been on my mind constantly."

Positive influence on relationships with patients: Shifting blame

- "I felt like it has been very effective in helping to build a partnership with patients. Acknowledging that the system is failing all of us... helps to build that relationship in a different way."
- "The blame went from here's this patient who makes poor choices to here we are as a society failing huge portions of our population."

Importance of this "bigger picture" framework

- "I think anyone practicing primary care who wants to be an effective clinician should be aware of these broader things that are impacting our patients, because otherwise, it's like you're just chipping away with a little drill and there's this whole bigger issue there."
- "It can be our responsibility to go to people within our structure and our system and start to advocate for these things that we really clearly see as being big issues every day. I feel like we can take that on and pursue that and advocate for our patients. I feel like that's part of the purpose of raising awareness among people like us who are front line people."

Shared vocabulary

- "I just want to emphasize how valuable I found it to have a shared vocabulary, to know [my fellow residents] know the same terms that I do... it just lowers the barrier to having these conversations. It's a lot easier to talk about now."
- "I remember my attending coming up to me and we're reviewing something and he's like, 'Structural violence!' He was so excited.... I think that he also very much appreciated having this new vocabulary."

Burnout

- "I feel like I'm more at risk for burnout after this training, because I feel like I don't have anything to do with the information, practical examples of what people do with it and how you address it."
- "I think for me there's less of an element of control.... In my 20 minutes, if I'm not going to have a way to address it, it just feels really disempowering."

Need for more concrete tools or steps

- "We are goal-oriented people, and we feel responsible and like we have got to do something."
- "I personally feel I'm really struggling with what's my future role going to be and what does that look like and not really having a model for that."

More and earlier training

- "This stuff is critical for absolutely everyone going into a primary care field who wants to be an effective clinician and patient advocate."
- "I think it would be totally fair to bring it up for the first time in med school. It would be good to develop tools before you get to a point where you need them in 10 minutes."
- "In all of this, you have built a lot of advocates for this training."

Table 5: Themes from the resident focus-group one month post-training

Resident Reactions: Potential for Empowerment versus Burn-out

The pilot also confirmed that structural competency can be emotionally difficult to incorporate upon returning to clinical rotations. When designing the training we took into account the

feedback from the seminar as well as the literature describing potential pitfalls of teaching similar topics to medical trainees as well as other audiences. ^{20,26,37} To avoid leaving participants feeling discouraged or hopeless, we sought to frame potentially disheartening material in an encouraging way—emphasizing that structures are made by people and can be changed over time and concluding the session by discussing practical strategies for responding to structures within and beyond the clinic. At the end of the training (see table 2), many residents reported a sense of empowerment and excitement; a few also expressed feelings of doubt about how they could apply this material.

Given this initial response, it was striking to learn of the extent to which residents reported distress after they had returned to clinical practice (see table 4). As one resident stated: "I feel like I'm more at risk for burnout after this training, because I feel like I don't have anything to do with the information, practical examples of what people do with it and how you address it." This was echoed by others: with increased awareness of their patients' structural vulnerability, they desired more concrete tools and examples of what could be done to address these issues.

Expanding Structural Competency to Medical School: "Develop tools before you need them in ten minutes"

In spite of these feelings of distress, the residents emphasized several times during the focus group that they were grateful to have participated in the training. In the post-training survey, one resident wrote that the training "Should be mandated for all medical students, residents, and practicing clinicians." At the focus group, the residents present echoed this sentiment, unanimously encouraging the training's development and expansion. They emphasized that structural competency should be introduced in the first years of medical school, to provide trainees a foundation in this material before immersion in the stresses of clinical responsibilities—to "develop tools before you get to a point where you need them in ten minutes."

Toward this goal, the Critical Social Medicine Working Group is currently working to integrate key insights from the training and seminar into the curricula of medical and other health professions schools. Below we discuss the key lessons from these two pilot efforts as well as areas for future pedagogical development and research.

DISCUSSION: LESSONS LEARNED

Two key themes emerged in common from our evaluations of the training and the seminar. First, participants felt that their engagement with structural competency was valuable and should be expanded to other programs, in part because of the conceptual frameworks and vocabulary it provided. Second, participants in both the seminar and the training reported that the subject matter discussed can feel overwhelming, and they expressed a need for practical strategies to address structural vulnerabilities in clinical settings and outside of them.

Impact of Structural Awareness on Residents' Practice

Perhaps the most remarkable finding from our evaluation was that residents continued to think about and discuss its contents so frequently one month after the training. At least part of this effect may be due to structural competency's provision of helpful "language and frameworks" to describe phenomena that providers hear about and witness effects of on a daily basis. We suspect that learning such terms and concepts both enables providers to better describe phenomena they have previously noticed as well as leading them to notice phenomena they might have otherwise overlooked. As suggested by residents, the sharing of such vocabulary among colleagues may reinforce this effect.

It is noteworthy that the training had such a marked impact at a residency program with a long-standing focus on providing care to underserved patients, a curricular emphasis on cultural responsiveness and faculty invested in providing thorough training in such topics. This response suggests that structural competency frameworks can offer meaningful additions even to programs that already emphasize social or cultural engagement. How this training will be received in other settings—especially programs less focused on working with underserved patients—deserves further investigation.

Discussion of structural vulnerability in clinic between residents and faculty is another important success of the training. Medical educators have spoken of the need for faculty development in the social sciences³⁸ and it has been suggested that the alarming decrease in medical trainee empathy over time may be attributable in part to dissonance between formal curricula and experiences in the clinic.^{39,40} Faculty who receive ongoing education and cultivation of skills similar to their trainees can reinforce rather than contradict this learning in the clinic.⁴⁰⁻⁴³ Moreover, as reflected in table 3, faculty also can benefit from protected opportunities to reflect and think critically about challenging or ambiguous clinical encounters.

The residents reported that this training also had a positive influence on their relationships with patients, helping them to "build a partnership with patients." Further research can help clarify the ways that structural competency frameworks, including structural humility, influence the practice and experience of healthcare providers. For instance, can approaching patients with this more contextualized, structural perspective promote empathy for patients in the long run? If demonstrated this would be an important finding, since, in addition to its importance to the doctor-patient relationship, empathy has been associated with improved patient health outcomes, increased patient satisfaction, and decreased provider burnout. 44,45

Challenges of Structural Awareness

Whatever the long-term effects of a structural approach may be, these residents' experience shows that incorporating a structural emphasis into clinical practice can feel initially overwhelming. In anticipation of this concern, we concluded the training by focusing on practical ways providers and patients might engage with the violent effects of social structures as encountered in their everyday clinical work. Residents, however, wanted more time to discuss

these possibilities and more examples of what others had done in the past. In future versions of the training, we plan to lengthen the training to allow for this.

Nevertheless, some feelings of distress may be inevitable when providers who daily witness the harmful results of malignant social structures examine these structures in a focused and critical fashion. Indeed, such emotional responses may be necessary for providers to develop their commitment to structurally humble, structurally informed practice. We recognize, however, the potential for residents to become overwhelmed by the many demands of training. To help protect against this, in subsequent iterations of the training we also plan to leave more time to acknowledge and discuss the emotional, moral, and intellectual distress that can arise when integrating these frameworks into clinical practice. It also bears noting that structural factors are at play—and can cause distress—whether or not clinicians explicitly attend to them. As such, it is possible that structural competency training may, over time, relieve some sources of distress.

The seminar's pre-clinical medical students also expressed concerns about the magnitude of structural forces and uncertainty about how best to address them. The emergence of these concerns among both medical students and residents—in one case anticipatory and in the other reflective of everyday clinical experiences—underscores the importance of creating protected space throughout medical education and training to identify, discuss, and attempt to respond to the realities of structural influences on patients' lives and the practice of clinical medicine.

It also may be important to articulate more explicitly in structural competency trainings that the changes in orientation described by the residents and medical students are valuable in themselves. Both wanted clear-cut action steps. However, these shifts—thinking and talking about patients in different terms, incorporating structural concepts into problem lists—themselves can make important differences in patient care. Ethnographic research suggests that, in the absence of a critical structural perspective, even the best-intentioned providers can unknowingly act in complicity with structural violence—thereby exacerbating health disparities in their delivery of care. ^{9,19,21,30} Thus, while such shifts in perspective are not sufficient to address the structural issues underlying health disparities, they nonetheless may meaningfully impact the healthcare experiences and outcomes of structurally vulnerable patients.

Interestingly, in neither pilot did we encounter signs of the "political correctness fatigue" described by Willen in her study of a cultural competency curriculum for psychiatry residents.²⁶ Nor did we see the "student resistance" described by Wear and Aultman.⁴⁶ Participants appeared engaged and enthusiastic; even as residents described feeling overwhelmed, they described themselves as "advocates" for the training, wanting to see it expanded to other sites. Further studies will help clarify the extent to which the absence of these responses among our students was due to an emphasis on structural forces rather than cultural characteristics, the particular population of learners we worked with, or other factors.

Integrating Approaches

Though time and scheduling prohibit including a full seminar in many medical school curricula, several worthwhile elements from the interdisciplinary seminar might be transferable. One such

element is a reflection exercise in which students create a structural analysis of a clinical setting through brief ethnographic observation guided by structural competency frameworks. Medical schools may also incorporate case studies that apply concepts drawn from social theory to clinical settings^{35,47,48} and short readings describing the limits of cultural competency,¹¹ the benefits of a structural critique in clinical care,⁹ and the ways that current clinical training subtly discourages accounting for patients' social context.^{28,48} We also found interdisciplinarity to be a valuable component of the seminar and recommend that medical school structural competency curricula include instructors trained in the social sciences. Moreover, we encourage the incorporation of structural competency into the education of all types of health professionals and believe that integration with interprofessional health education could further enrich this effort.

We recommend integrating elements from both pilots into structural competency curricula at medical schools and residency programs. Elements from the seminar could usefully be incorporated as longitudinal follow-up to an introduction to structural competency such as the training. These follow-up sessions would provide ongoing opportunities for learners to deepen their understanding of structural competency concepts, articulate insights that arise from applying these frameworks in clinical settings, and develop their emotional, intellectual, and practical responses.

CONCLUSION

Social inequality is increasing in the United States and globally. Given that social structures are among the primary determinants of illness and health, physicians must be equipped to address this reality. Our findings suggest that such engagement occurs when clinicians share frameworks to help them recognize and articulate such phenomena, and that training in structural competency provides a promising means for the development of such shared frameworks. Our findings also highlight that reflecting on social inequalities and their effects on health is distressing when remedies are not readily apparent. As discussed above, there are several ways this distress might be mitigated in structural competency curricula. We also found that medical student, resident, and faculty participants felt generally enthusiastic about expanding structural competency in medical training.

Some will argue that clinicians do not have time to assess or respond to the complex structural problems their patients face. This is an important concern that structural competency education must address. ^{39,40,49} In the context of significant and growing health and healthcare disparities, however, we pose the question: what is the cost of not incorporating structural competency into medical training and practice?

Ultimately, it makes no more sense for clinicians to overlook the structural determinants of health than it does for them to ignore diseases that are currently incurable. Though encountering such diseases can also be distressing, medicine as a discipline has developed through directly confronting such challenges—gathering data, seeking solutions, sharing ideas and results. Similarly, physicians and other healthcare professionals can play an important role in addressing the structural issues that are detrimental to the health of patients by working alongside the communities they serve to collectively recognize, report and confront these issues. For this to

happen, clinicians will need a common foundation in these issues—a foundation that our preliminary efforts suggest structural competency can provide.

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