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Providing Integrative Medicine to Low-income Patients though Group Visits

by

Ariana Thompson-Lastad

DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

SOCIOLOGY

in the

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of the

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Copyright 2018 by Ariana Thompson-Lastad "Caminante, no hay puentes, se hace puentes al andar."- Gloria Anzaldúa

"Concern looks on.... Care interrupts."- Danez Smith

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Providing Integrative Medicine to Low-income Patients though Group Visits Ariana Thompson-Lastad

Abstract

Inequalities in health care delivery are perpetuated through a combination of interpersonal, institutional, and structural factors. This dissertation examines the emergence of a new model of care in relation to health care inequalities and resulting racial/ethnic and socioeconomic disparities in health outcomes. I investigate integrative group medical visits (IGMVs) as an innovation in the structure and process of health care in settings with limited resources, specifically safety-net primary care. IGMVs are a clinic-based intervention that aims to improve patient health by combining biomedical care with complementary health approaches such as acupuncture and yoga, as well as peer support and health education. My research approaches IGMVs as a potential site of addressing inequalities, particularly stratified access to integrative health care.

This mixed-methods project draws on 52 interviews, ethnographic observation of 20 distinct IGMVs, and an exploratory survey. It provides a national overview of safety-net IGMVs in 11 states as well as an in-depth examination of IGMVs at four organizations in California and Massachusetts. The first chapter describes characteristics of IGMV programs, providers, and sites throughout the US, finding that they are most commonly used for chronic conditions including diabetes and chronic pain. The next chapter examines changing social relations made possible by group visits, including an expanded role for patient knowledge. I find that patients take active roles in each other's care, supporting, challenging, and advocating in ways that shift patient-provider relationships. The final chapter situates the current opioid crisis and related uncertainties surrounding the treatment of chronic pain through safety-net IGMVs. I show how integrative health care is perceived as a safe

risk to take against a national context where prescribing and using opioids is seen as comparatively high risk.

This study suggests group visits can restructure patient-provider encounters to interrupt healthcare inequalities, shifting roles and increasing time between patients and providers. My findings point to the promise of group-based care in increasing access to complementary health approaches and providing interdisciplinary care for chronic conditions. Finally, participants in my research articulated how group visits help address trauma at both the individual and community level, in part by breaking social isolation.

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Introduction

Overview

This dissertation project focuses on integrative group medical visits (IGMVs), a health care intervention at the intersection of three central concerns: 1) The need for patient-centered, interdisciplinary care to address inequalities in health care delivery; 2) Widespread interest in integrative health care and complementary health approaches, which are often inaccessible to low-income people due to limited insurance coverage and high out-of-pocket cost, and 3) The growing use of group medical visits, which combine medical care, health education and peer support to treat a wide variety of health conditions. Integrative group medical visits have been developed and implemented primarily (though not exclusively) in safety-net primary care clinics, and include biomedical care, complementary health approaches such as mindfulness and acupuncture, and patient education and support. My project is the first to use a sociological framework to examine this kind of intervention.

This mixed-methods project uses interviews, ethnographic observation, and an exploratory survey to provide a national overview of safety-net IGMVs as well as an in-depth examination of IGMVs at four organizations in California and Massachusetts. The dissertation includes three article-length manuscripts developed for peer-reviewed journals. The project built on my pilot qualitative study of clinicians who provide care in group medical visits (GMVs), as well my clinical experience with this approach to medical care. In this introduction, I begin by defining "integrative group medical visit" and related terms. I then provide empirical background on safety-net health care, group medical visits, and the stratification of integrative health care. This is followed by the theoretical framework of the dissertation. While the three article manuscripts provide in-depth

information on research methods, in this introduction I summarize my methods and describe the settings of my research. I end with a brief summary of the three articles.

I use the terms "integrative health" and "complementary health approaches" to align with current language used by the NIH (National Center for Complementary and Integrative Health 2015). "Complementary health approaches" refers to treatments other than biomedicine, including "natural products" such as herbs and supplements, as well as a wide variety of mind-body practices, including those that can be practiced alone (such as meditation), as well as treatments such as acupuncture that require a trained practitioner. Defined expansively, "Integrative medicine and health reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic and lifestyle approaches, healthcare professionals and disciplines to achieve optimal health and healing" (Academic Consortium for Integrative Medicine & Health 2015). NIH materials succinctly describe integrative medicine as the combination of 'conventional' (i.e. biomedical) and complementary health approaches (National Center for Complementary and Integrative Health 2015).

For this project I define IGMV as including all of the following elements:

- o Care is provided to multiple patients in the same room.
- o A provider bills insurance using ICD-10 codes and documents in the medical record.
- At least one complementary health approach (e.g. acupuncture, mindfulness, yoga) is part of most group sessions.
- o Patients interact with each other during the group session.

This definition only included some GMVs at my research sites. It also excluded programs such as group therapy, some group acupuncture programs, and peer support groups, all of which provided some elements of IGMVs without biomedical care. In informal conversations with clinicians, this definition caused some confusion because they did not always differentiate their work as 'integrative'

or non-integrative. Though many saw themselves as providing integrative health care, some were surprised that cooking, expressive arts therapy, and "integrated behavioral health care" (Farber et al. 2017) were generally not included in my working definition of integrative health care. I did interview mental health providers, but only those who co-facilitated IGMVs with providers and care addressing physical health concerns. In addition, this project focused on sites that accepted Medicaid and served patients who were uninsured.

Background

This project examines an intervention into the process of care, with attention to safety-net primary care, integrative health care, and group medical visits. The following sections highlight relevant themes and challenges in each of these areas as related to IGMVs. Chronic pain was not an empirical area that I intended to focus on but was the primary condition for which IGMVs were being implemented. For this reason, I focus on chronic pain across these three areas.

Safety-net primary care, trauma and chronic pain

IGMVs have primarily been implemented in community health centers, also known as Federally Qualified Health Centers (FQHCs). These outpatient safety-net clinics receive federal funding to provide care for uninsured and publicly insured people. At the time of my research (2016), there were several cross-cutting themes relevant to IGMVs in safety-net care, including growing access to care thanks to the Affordable Care Act; increasing attention to trauma, stress, and social determinants of health, and the crisis of chronic pain treatment and opioid addiction.

The National Association of Community Health Centers reports that 71% of community health center patients live below the poverty line (just over \$20,000 for a family of three in 2015),

and 62% are people of color, including many immigrants (National Association of Community Health Centers 2017). FQHCs typically provide a wide range of services, including primary care for all ages as well as mental health care, dental care, and support services that may include exercise classes and free food programs. At the time of this research, Medicaid eligibility had recently expanded in both California and Massachusetts as a result of the Affordable Care Act, and FQHCs were reporting growing numbers of Medicaid patients (National Association of Community Health Centers 2017). However, many people would remain uninsured, including undocumented immigrants, who were neither eligible for Medicaid nor permitted to purchase private health insurance (Hacker et al. 2015). This left access to health care for undocumented immigrants as an issue that would be determined at the state or even county level, with widely varying access to care depending on location. Such concerns about access to care were visible at my research sites, where some patients were newly eligible for Medicaid, while others remained uninsured and struggled with limited access to care. This shift in eligibility would particularly improve access to care for low-income, childless adults, including those who had chronic conditions but were not officially deemed disabled.

It is now widely understood that chronic stress and trauma impact the body in a multitude of ways and are associated with the development of chronic physical illnesses such as diabetes, as well as other health conditions including low birth weight and substance use. The Kaiser Permanente Adverse Childhood Experiences study (Felitti MD et al. 1998) was the first to demonstrate at a large scale that Adverse Childhood Experiences (ACEs) (e.g. incarceration of a parent or divorce) are correlated with cumulative negative impacts throughout the life course. Specifically, ACEs are associated with a variety of physical and mental health conditions in adulthood, as well as multimorbidity (multiple chronic illnesses) (Danese and McEwen 2012; Sinnott et al. 2015)

Subsequent research has shown that this process happens through multiple mechanisms including

physiological changes, emotional and psychological changes, and the increased likelihood of habits (such as using tobacco and other harmful substances) that contribute to mental and physical illness (SAMHSA's Trauma and Justice Strategic Initiative 2014). In addition to the increasing attention to adverse childhood experiences (ACEs) and their impacts on the body and brain, there is a growing body of research examining individual experiences of persistent traumatic stress or synergistic trauma, as well as collective trauma experienced at the community level (HOROWITZ, WEINE, and JEKEL 1995; Martín-Baró et al. 1994; Pinderhughes and Davis 2013).

The term "trauma-informed care" originated in fields including juvenile justice and mental health and has recently spread to medical settings (Bowen and Murshid 2016). Machtinger and colleagues (2015) provide a clinical framework for "trauma-informed primary care" that has not been widely implemented, but is an indication of how awareness of trauma and interest in responding to it in the primary care setting continues to grow. For people living with chronic stress and traumatic history, accessing health care services can itself be re-traumatizing. Clinicians throughout the safety-net are seeking alternatives that will allow them to care for patients struggling with trauma, address disparities in clinical care, and provide integrative approaches to care that resist some of the trends in standard biomedicine. Research demonstrates that social support buffers the impacts of stress and trauma in ways that protect physical and mental health (Bloom and Farragher 2010; Stopford, Winkley, and Ismail 2013). Group visit providers draw on this research in framing their work as a social support intervention that will improve health outcomes. Many clinicians in my research are associated with a national network called Integrative Medicine for the Underserved, which brings together clinicians for training on group visits, mind-body approaches for treating stress and trauma, and integrative health care for chronic conditions more broadly.

An emergent finding of my research was that IGMVs were primarily being implemented for chronic pain. Recent epidemiological research suggests that safety-net patients are more likely to

experience pain than the broader population: though nearly one in five US adults lives with persistent pain (Kennedy et al. 2014), and racial and socioeconomic inequalities in chronic pain mirror those that exist with many other health conditions. For example, among older adults, disabling chronic pain is significantly more common among low-income people. and black adults have higher rates of pain-related disability than white adults (Janevic et al. 2017). Other studies have shown that racial disparities in incidence of chronic pain are mediated by socioeconomic factors such as neighborhood socioeconomic status (Green and Hart-Johnson 2012), and that language barriers pose substantial barriers for Spanish-speaking immigrants seeking chronic pain care (Hollingshead et al. 2016). Frequent pain is more common among people with multiple chronic health conditions (Robinson et al. 2017), and people with histories of childhood abuse (Sachs-Ericsson, Kendall-Tackett, and Hernandez 2007). As Pryma (2017) discusses in her recent work on intersectionality and women with fibromyalgia, race, socioeconomic status, and gender heavily shape individuals' experiences of chronic pain diagnosis and treatment. Chronic pain care has been heavily shaped not only by stratified access to primary care (Hurstak and Kushel 2016; Knight et al. 2017), but also by racial/ethnic discrimination by health care providers, who have historically undertreated pain among African-American and Latina/o patients (Anderson, Green, and Payne 2009; Meghani, Byun, and Gallagher 2012). These inequalities have life-threatening consequences.

Group medical visits

'Group medical visit' and 'shared medical appointment' are broad terms used to include several structured models of care as well as many other efforts that have not been codified or researched. GMVs share a combination of medical care, education and peer support, and quantitative and qualitative outcomes have been studied for a variety of types of GMVs. Generally, health outcomes studies have found comparable or better outcomes for GMVs as compared to

et al. 2015) and diabetes (Edelman et al. 2012). More recent research has found a variety of positive outcomes for GMV patients with chronic pain (Chao et al. 2015; Gardiner et al. 2014; Gaynor et al. 2007), as will be explored in Chapter 5. Though GMVs have rarely been part of broad discussion of health care reforms, in recent years public awareness and professional validation for these approaches has grown, from publications like the New York Times (Gustke 2016) as well as major medical associations (American Academy of Family Practice n.d.; American College of Obstetricians and Gynecologists 2018).

Three of the most widely used and studied approaches are Drop-in Group Medical Appointments (DIGMA), developed by psychologist Edward Noffsinger (Noffsinger 2012), cooperative health care clinics (CHCC), developed thought not widely implemented at Kaiser Permanente (Scott et al. 1998), and the Centering model, developed by nurse-midwife Sharon Rising for prenatal care (Schindler Rising, Kennedy, and Klima 2004). There is a great deal of variation among GMVs including in the level of structure in curricula, whether or not patients observe each other's medical care, and what kinds of staff facilitate. Some sites use structured curricula developed by non-profit organizations (such as the Centering Healthcare Institute) or for-profit businesses (such as the diabetes curriculum developed by the pharmaceutical company Merck). Other sites develop their own curricula or use less structured approaches. Group visits may replace individual primary care, though pap smears and other procedures requiring privacy generally take place in separate visits, as do acute care needs that arise between group meetings (Clancy et al. 2008).

A sociological approach to the study of group medical visits can integrate attention to health outcomes, patient and provider experiences, and how these interventions relate to broader health care reforms and efforts to address inequalities in care. These interventions have a variety of goals, including improving access to specific kinds of care, improving physical and mental health

outcomes, and supporting social connectedness. Group visits have been widely used with low-income patients in the US, and there is growing attention to whether elements of group care have different effects for patients across socioeconomic status or other axes of inequality (Byerley and Haas 2017; Geller, Kulla, and Shoemaker 2015; Novick et al. 2012). Social support and other elements of GMVs may make care more accessible to underserved patients if the visits have "features designed to address a number of personal stressors in the lives of" patients, as Novick and colleagues (2012: 2) claim about Centering Pregnancy. Advocates of group visits have promoted them as a strategy to narrow health disparities (Geller, Orkaby, and Cleghorn 2011a; Tandon et al. 2012; Trudnak et al. 2013). However, certain populations are excluded from group visits in some or all settings, including people with substance use or severe mental illness (Miller et al. 2004, Brennan et. al. 2011), those who do not speak English or are deaf (Cohen et al. 2012), or patients who must bring their children with them to appointments (Novick et al. 2012).

Integrative Health Care and Stratification

Earlier research on complementary health approaches often used framings of traditional medicine or folk medicine, and assumed that people of lower socioeconomic status were more likely to use complementary health approaches than those with more financial resources (Chao and Adler 2018; Kellner and Wellman 2000). More recent quantitative research has generally shown that in the US, people with higher education or income are more likely to use complementary health approaches; however, research may not accurately include some approaches widely used by those of lower SES (Carrillo 2008; Poss, Jezewski, and Stuart 2003; Sointu 2012).

Use of complementary health approaches appears to vary depending on whether complementary health approaches are more or less affordable and accessible than biomedical care (Pisani et al. 2012; Rogers 2010; Weigel, Armijos, and Beltran 2013). National data has shown that

people are more likely to use complementary health approaches if their health issues are not successfully addressed by biomedicine (including people of higher SES) or if they have to delay biomedical care due to cost (presumably due to lower SES) (Nahin et al. 2009). Awareness of particular complementary health approaches also appears to vary with their accessibility. One recent study (Burke, Nahin, and Stussman 2015) found that among people with chronic back pain,

Lack of knowledge was found to affect utilization of common complementary health practices, regardless of the potentially motivating presence of back pain. Disparities in the utilization of complementary medicine, related to educational attainment and other socioeconomic factors, may negatively affect quality of care for many Americans. (2015: 1-2).

Studies of specific complementary approaches have also found that people of lower SES tend to be less likely to access these forms of care (see for example Zodet and Stevans 2012). Nonetheless, some recent studies of low-income people have found high rates of complementary health approach use. For example, among hospitalized patients at one safety-net hospital, 50% of patients used some form of complementary health approach (Gardiner et al. 2013, 2015).

The ongoing opioid crisis is contributing to a growing interest in complementary health approaches as non-pharmacological options for treating chronic pain and opioid addiction. The Joint Commission now mandates that accredited health facilities provide non-pharmacological pain treatment (Joint Commission 2017), and the Veterans Health Administration covers a variety of complementary health approaches for treatment of chronic pain (Kligler et al. 2018). However, federal Medicaid and Medicare policy does not allow for reimbursement for most complementary health approaches, although some state Medicaid programs are currently running pilots to reimburse for particular approaches to chronic pain treatment (Clemans-Cope et al. 2017; Weeks 2018).

Theoretical Motivations

I developed this project with the intention of conducting research on health care inequality that would not simply "document pain and loss" (Tuck 2009: 413), but would also attend to "the hope, the visions, the wisdom of lived lives and communities" (2009: 417). Such an approach is especially relevant because many advocates of group visits view them as a strategy for addressing injustice within health care. I sought to avoid doing research that would "benefit from depicting communities as damaged" (412), rather lifting up an approach to care that seeks to ameliorate health care disparities, recognizing the complex experiences of patients, clinicians, and other stakeholders. Studying the experiences of clinicians gives attention to those who shape IGMVs and have power over how medical care is delivered. Studying the perspectives of safety-net patients bring attention to how they participate in, resist, and shape the kinds of care that are offered to them.

As a student of sociology, I saw the symbolic interactionist tradition as one that makes it possible to take seriously the perspectives of multiple stakeholders, and developed the project using a variety of social science and health-related theories as sensitizing concepts (Clarke 2005). I intended medicalization, demedicalization and biomedicalization to provide an overall framing for how IGMVs are situated within broader tendencies in health care. In addition, I framed the dissertation using theories related to social and structural determinants of health. Social medicine, liberation medicine, and structural competency frameworks address the potential roles of health care providers in addressing health and illness in and beyond the clinic. In this section, I also address theories of integration and medical pluralism (Chapter 2), lay and expert knowledge (Chapter 3), and uncertainty (Chapter 4).

Medicalization, demedicalization and biomedicalization

Group medical visits can be understood as an example of medicalization, demedicalization, and biomedicalization. These concepts provided context and framing for this project by providing a theoretical lens for understanding the epidemiological data on complementary health approaches and connecting with concepts of stratification and self-care. Ehrenreich and Ehrenreich (1979) presaged ideas of medicalization later explored by other medical sociologists. They argue that medicine has simultaneously exerted two forms of social control: disciplinary (primarily excluding people of lower SES from care) and co-optative (primarily expanding care for people with higher SES). Others have claimed that demedicalization takes place in response to and in parallel to medicalization, and in doing so makes evident the social construction of sickness (Fox 1977; Halfmann 2012; Lowenberg and Davis 1994). Lowenberg and Davis (1994) suggest that holistic health care may be an example of demedicalization because they found more caring and informal interaction between patients and 'holistic' clinicians than in many biomedical settings; however, holistic health care brought medical attention to patients' spirituality and other areas not attended to by biomedicine and tends to focus on individual responsibility rather than the social causes of poor health. Clarke and colleagues (2003) developed the concept of biomedicalization, "the increasingly complex, multisited, multidirectional processes of medicalization...extended and reconstituted through the emergent social forms and practices of...biomedicine" (162). One key area of biomedicalization is the transformation, proliferation, and shifting distribution of heterogeneous forms of medical knowledge, including those not previously seen as part of biomedicine. Integrative health care and group medical visits both shift how multiple forms of knowledge are used in biomedical settings. Medicalization has and continues to effect people differently based on race, class and gender (Clarke et al. 2003; Ehrenreich and Ehrenreich 1979). While some groups of people are encouraged to seek technologically advanced care and resources to keep them healthy,

others are excluded even from basic care for life-threatening conditions (Clarke et al. 2009; Ehrenreich and Ehrenreich 1979; Fox 1977). Group visits tend to emphasize self-care and lay expertise by encouraging patients to take an active role in their own and each other's care. Inasmuch as group visits mirror typical/individual care, they are advancing biomedicalization. Yet it could also be argued that group medical visits are one of few care innovations resisting biomedicalization. Shim suggests that "lay knowledge about the social etiology" of illness serves to "reveal how biomedicalization is continually contested and negotiated" (2010: 220). Many group visits and integrative health care programs emphasize shared expertise, in-person interaction, and ongoing relationships, brought together in a low-tech setting.

Social and structural theories of health care

Throughout the dissertation, I draw on theories of social medicine, liberation medicine, and structural competency to address how IGMVs meet social and structural determinants of health. Social medicine has historically focused on integrating clinical care with an understanding of the economic, environmental and social causes of disease (Porter 2006). Liberation medicine, "the conscious and conscientious use of health to promote human dignity and social justice" (Smith 2007: 132), emphasizes that clinical care ought to respond to the self-defined needs of poor communities. Liberation medicine builds on psychology for liberation, developed by Salvadoran psychologist/priest Ignacio Martín-Baró to address community exposure to trauma in El Salvador. Martín-Baró calls on his fellow psychologists to start with marginalized peoples' perspectives on their own mental health rather than stay rooted in the perspective of people in powerful professional roles, considering, for example, "What would mental health look like from the place of a tenant farmer?" (Martín-Baró, Aron, and Corne 1994). In contrast to individual care, group visits make

space for the health-related knowledge that laypeople bring and provide adequate time for clinicians to ponder these kinds of questions.

More recently, physician-social scientists have called for clinicians to be trained in "structural competency." This framework includes both 1) awareness of how structural issues not only shape social determinants of health, such as housing and education, but also influence individual health and 2) skills for taking action to address these structural issues (Metzl and Hansen 2014). They define structural competency as

the trained ability to discern how a host of issues defined clinically as symptoms, attitudes, or diseases (e.g., depression, hypertension, obesity, smoking, medication "non-compliance," trauma, psychosis) 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 (2014: 128).

Social medicine, liberation medicine, and structural competency share attention to structural and social determinants of health, viewing these as necessarily connected to the practice of clinical medicine. They draw on implicit assumptions that socioeconomic status is a fundamental cause of poor health (Phelan, Link, and Tehranifar 2010; Reich, Hansen, and Link 2016), and engage with the limits and possibilities of health care's role in addressing such fundamental causes. These frameworks assume and implore clinicians to understand their patients' lives in context, and to take action in ways that will have impact beyond their individual patients. Some IGMV models focus on empowerment and social support as treatment for trauma and chronic stress (Geller, Orkaby, and Cleghorn 2011b; Novick et al. 2013), drawing on the empowerment focus of health social movements including the natural birth movement (Davis-Floyd and Johnson 2012). I also observed attention to social and structural issues in the content and structure of some IGMVs, as well as in how clinicians and patients spoke about what IGMVs could contribute.

Medical pluralism and integration

As I will explore further in Chapter 2, integrative medicine has been described by some as medicalization or co-optation (Baer 2004), and as an example of the growing imperative to be working constantly towards better health. The development and implementation of integrative medicine group visits for low-income people could be critiqued as an example of co-optation of integrative medicine, or an example of stratified biomedicalization, in which different treatments are seen as suitable for different people.

Medical pluralism, the use of multiple distinct approaches to health, often invoked to describe how people use complementary health approaches and biomedicine together. Gale (2014) argues that pluralism implies patient choice, without acknowledging that particular approaches may be chosen for pragmatic reasons such as financial accessibility. Writing about Mexican Americans and medical pluralism, Kiesser and colleagues describe people as moving between biomedical and complementary approaches "based on what they can access, what they can relate to, and what they believe works" (2006:223). Anthropologist Baer points out that "patterns of medical pluralism tend to reflect hierarchical relations in the larger society" (2004: ix). That is, some medical subsystems or complementary health approaches are valued more than others, with biomedicine at the top.

As discussed above, integration is currently a popular way of describing the use of both biomedical and complementary health approaches. However, social scientists have several critiques of integration, related to concerns about co-optation, appropriation, and lack of attention to social inequalities. Hollenberg and Muzzin, in what they describe as an anti-colonial approach, state three related concerns about integration: "(a) the devaluing of non-biomedical health knowledges; (b) accepting only biomedical evidence; and (c) the creation of a biomedical monolithic worldview" (Hollenberg and Muzzin 2010: 35). Integration has the potential to result in biomedicine taking the pieces of complementary health approaches that most easily fit into a biomedical paradigm and

practice while diluting or erasing elements such as indigenous knowledge and treatment connected to spirituality. One element of Gale's typology of complementary health approaches (Gale 2014) is activism: she positions use of complementary health approaches as embodied resistance to biomedicine, and in some cases a cultural practice in response to colonization. Baer concurs that "alternative medical systems or health movements often exhibit counterhegemonic elements that resist, often in subtle forms, the elitist, hierarchical, bureaucratic or iatrogenic aspects of biomedicine" (2004: x). Such analysis acknowledges that complementary health approaches may come out of grassroots efforts. However, collaboration with biomedicine (i.e. integration) is a compromise that allows these grassroots efforts to become accessible to more people.

Lay, expert and authoritative knowledge

Rather than assuming a clear divide between expert and lay knowledge, I acknowledge that there are multiple forms of knowledge, each partial and overlapping with its own degree of socially designated authority. Much medical sociology research has focused on laypeople learning to influence scientific research (Brown 1992; Brown, Morello-Frosch, and Zavestoski 2011; Epstein 1996). In health care, with doctor/expert and patient/layperson as the two central roles and forms of knowledge, there is an assumption that the clinician is the expert in any interaction (Davis-Floyd and St. John 1998). Sointu (2012) complicates this binary approach, pointing out that complementary health practitioners are often criticized by physicians and scientists for lacking biomedical expertise, even as their patients view them as experts on health and healing. In US health care today, clinicians are expected to provide support and care that is patient-centered (Constand et al. 2014) and empathetic (Hirshfield and Underman 2017) as well as technically skilled. However, in standard care settings, visits are extremely brief and clinicians are often unable to perform these multiple forms of expertise (Fiscella and Epstein 2008). Research on the midwifery

model of care has shown the benefits of continuous care with ample time for patient-clinician interaction (Schindler Rising et al. 2004). GMVs are a model that not only includes increased time with the provider, but an expanded role for patients to provide care and support for one another.

Medical sociologists disagree about whether lay knowledge about health is a form of expertise (Popay and Williams 1996; Prior 2003). In a parallel disciplinary conversation, medical anthropologists have put forth the concept of "authoritative knowledge," the dominant knowledge in a given situation (Millard and Kingfisher 1998; Potter et al. 2016). Though lay knowledge could ostensibly be authoritative knowledge, this is unlikely in a health care context. However, some people develop "syntheses of biomedical, lay, and bodily knowledge" in an attempt to reconcile medical advice with their own experiences (Millard and Kingfisher 1998:448). Group medical visits seek to make space in the clinical interaction to value of patients' knowledge and perspectives (Kennedy et al. 2009; Lavoie et al. 2013). Patients share narratives of personal experience and also may have space to discuss what Cornwall calls "public accounts" of how they think health and society work (1984). In addition, GMVs may allow for collective constructions of health and illness, in which patients come to understand their own health problems in relation to the health of their peers and communities, a phenomenon more often explored in popular education (Freire 2014) than in health care. Theory on the contributions of and conflicts between expert and lay knowledge inform this project overall and are the focus of Chapter 3. In this chapter, I conceptualize patients' knowledge and roles in IGMVs, providers' understandings of expertise, and patients' roles in their peers' care.

Feminist theories of standpoint (Smith 1987) and intersectionality (Collins 2002) also inform my understanding of patient knowledge in medical settings, by making the case that experience is a valid and often unacknowledged basis for knowledge construction. Writing about biomedicalization and intersectionality, Shim discusses how SES stratifies access to information as well as exposure to

health risks, intersecting with the ways that race and gender shape health (2009: 227). However, she writes, dominant professional knowledge about health struggles to acknowledge these intersections.

GMVs re-structure time and knowledge in medical care in ways that may create space for shared standpoints and intersectional identities. One article on GMVs uses the term relationshipcentered care to describe how "by taking health care out of the examination room, barriers between health care providers and patients are decreased" while allowing patients to develop relationships with peers (Massey, Rising, and Ickovics 2006: 287). This valuing of lived experience is a major departure from standard medical care, in which patients are unlikely to ever meet their health care providers' other patients, and the brevity of visits makes it difficult to lower inherent barriers in the patient-provider relationship. However, as Briggs and Mantini-Briggs explain, "No matter how much time a physician devotes to hearing a patient's narrative...he or she exercises substantial control over who narrates, the form it takes, and how long the story proceeds" (2016: 163). Providers exert control in IGMVs, making decisions about the structure and process of care, and who attends and participates. Theories of health education suggest that medical care and support can enhance patients' self-efficacy, thus helping to improve mental as well as physical health (Ford et al. 2001; Lorig and Holman 2003). The structure of group visits underscores the ways in which health is a social relationship, in which support from others enhances self-efficacy and directly contributes to patients' health and wellbeing. My analysis reveals this not only as an individual phenomenon, but a development of shared expertise among patients.

Uncertainty

Chapter 4, which focuses on chronic pain treatment in IGMVs, is framed by multiple forms of uncertainty related to the opioid crisis, the etiology and treatment of chronic pain, and the safety and efficacy of complementary health approaches. These forms of uncertainty manifest in the

interactions that make up clinical care. Littlejohn and Kimport (2017) review extensive research on how providers manage clinical uncertainty in their interactions with patients. They present providerpatient interaction "as a social process involving the translation and presentation of uncertain information" (2017: 450), and describe how in contraceptive counseling, providers variously elide or emphasize uncertainty about side effects to encourage patients to use particular forms of contraception. I also write about uncertainty following Rouse (2009), whose research on sickle cell disease and health inequities emphasizes the role of uncertainty in racial discrimination, access to particular treatments, and how clinicians understand their patients' suffering. Rouse examines sites where peer support and complementary health approaches are used to support people with sickle cell and argues that in contrast to hospital-based care, these locations "allow patients to feel agentive, as subjects rather than medical objects, and at the same time they embrace uncertainty rather than attempt to conquer it" (2009: 224). I argue that IGMVs have been created at the nexus of multiple forms of uncertainty about the safety of opioid medication, the etiology of many cases of chronic pain, and the efficacy of complementary health approaches. Patients and providers actively engage these uncertainties, while assuming that at least some of the multiple therapeutic aspects of IGMVs will be beneficial to patients.

Research Questions

I designed the project in response to my experience as a group visit facilitator, gaps in the literature on group medical visits, and the theoretical concerns outlined above. Some of my research questions are addressed in the dissertation, and others which will be explored in future manuscripts based on dissertation data.

- · What is the impetus for providing care in integrative medicine group visits and how are they being implemented in the health-care safety net?
- · How, if at all, do clinicians view this approach to care as addressing health inequalities, stress and trauma in their patients' lives?
- · How, if at all, does the presence of multiple patients change the patient-provider power dynamic present in typical medical care?
- · What is the role of lived experience and patients' knowledge of their health in integrative medicine group visits?
- How do patients develop relationships with their peers within and potentially outside of the medical care setting?

The emphasis on treating chronic pain with integrative medicine was an emergent finding of this research and is the subject of Chapter 4.

Methods

This mixed-methods dissertation uses an exploratory survey of IGMV staff throughout the US as well as participant observation and interviews from four health care organizations in California and Massachusetts. Qualitative data collection included interaction with IGMV patients, clinicians, support staff and administrators, as well as collecting documents such as patient forms and handouts. I observed 20 distinct IGMVs and interviewed 25 patients and 28 staff members¹. Using multiple methods allowed for both a national overview of IGMVs and an in-depth

¹ Demographic tables for the survey are included in Chapter 2, and demographics of the qualitative research sample are in Chapter 3.

examination of the process of care and experiences of stakeholders at four organizations with wellestablished IGMV programs. Research methods are presented in more detail in each chapter.

The qualitative elements of this project used ground theory methodology. Constructivist grounded theory, as practiced by Charmaz and others, "places priority on the phenomena of study and sees both data and analysis as created from shared experiences and relationships with participants and other sources of data" (Charmaz 2006: 130). It allows for full examination of the co-construction of this approach to care by the stakeholders involved. As a researcher with personal experience in the phenomena I am studying, this approach to coding and memoing supported ongoing awareness of where participants' meanings stood apart from my own and where shared experience led to shared analysis. Another strand of grounded theory that I draw on is Clarke's situational analysis (2005), a theory/methods package that emphasizes the study of "situations," broadly defined, with attention to multiple knowledges and discourses. These approaches to grounded theory acknowledge that any situation is multi-faceted and socially constructed both before and by the research process.

Setting

The four organizations I focused on included county-run clinics and non-profit FQHCs. All offer primary care at multiple sites, and serve low-income patients including uninsured people and recent immigrants. Most began by offering group prenatal care or GMVs for diabetes and have since expanded to offer a variety of IGMVs. In addition, all offered other ways to access complementary health approaches and group support. For example, some sites offered individual acupuncture or group yoga classes, as well as mental health care, food access programs, and exercise classes.

All four sites offered IGMVs for people with chronic pain; some also offered IGMVs for other conditions. Some placed the emphasis on pain; for example, a monthly group that exclusively

served patients with chronic pain and introduced a variety of treatment modalities including meditation and acupuncture. Others focused on a single complementary health approach for patients with a variety of health conditions; for example, a weekly yoga IGMV included many patients with chronic pain. IGMVs offered a wide variety of complementary health approaches, sometimes multiple approaches within the same group. Most common was mindfulness and other forms of meditation, offered at all sites. Three organizations offered yoga, two offered acupuncture, and one each offered osteopathic manipulative treatment, massage, and energy medicine.

At all four organizations, GMVs and integrative health care were not central to their work, which focused on individual primary care. One minor place where I noted the ad hoc nature of IMGVs is visible was their minimal visibility on the organizations' websites. Two of the four organizations that I studied make only cursory mentions of their integrative health care services or group visits. The other two have brief sections dedicated to describing IMGVs and related services; one has a phone number listed for prospective patients to call. None highlights IMGVs, GMVs, or integrative medicine in any visible place on their websites, though at some clinics the existence of these programs was visible in fliers or posters in clinic waiting rooms.

When I began developing this project, I was a health educator at one of the organizations where I subsequently conducted dissertation fieldwork. In my role as a health educator, I developed and co-facilitated GMV programs for people with diabetes and supported efforts to make complementary health approaches accessible to our patients. Patients who participated in GMVs pleaded with my colleagues and me to allow them to continue in group indefinitely rather than return to hurried individual care. After learning that others were using GMV models to increase access to integrative health care, I decided to develop a project that would explore potential contributions of IGMVs to addressing disparities in access to complementary health approaches as well as health care inequalities more broadly.

Overview of Dissertation

This project sought to explore the adoption of integrative group medical visits as an innovation in the structure and process of care. I focus specifically on how IGMV models aim to increase access to high-quality integrative health care for low-income people who receive primary care in community health centers. The dissertation includes three articles, each intended to reach a multi-disciplinary audience interested in health care inequalities. The three articles are as follows:

Chapter 2: Draws on data from exploratory survey of IGMV providers to provide a national overview of IGMVs, with a focus on safety-net settings. The commentary following the manuscript examines relevant critiques of integrative health care [survey article submitted to Journal of Health Care for the Poor and Underserved, March 2018]

Chapter 3: Using qualitative data, this chapter analyzes the ways that patients and providers participate in IGMVs, including how patients are part of each other's health care provision and how the group setting shifts patient-provider relationships. [published in Qualitative Health Research, May 2018]

Chapter 4: Focuses on how IGMVs are being implemented to treat chronic pain, drawing on qualitative data to examine the conditions that enable and limit IGMVs amidst multiple kinds of uncertainty. [plan to revise, then submit to Social Science and Medicine in Fall 2018].

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Chapter 2, Part 1:

Integrative Group Medical Visits: A National Scoping Survey of Safety-Net Clinics

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Integrative Group Medical Visits: A National Scoping Survey of

Safety-Net Clinics

Abstract

Purpose: Integrative group medical visits (IGMVs) aim to increase access to integrative health care,

which is particularly relevant for low-income people. We sought to describe IGMV programs in US

safety-net clinics through a clinician survey.

Methods: An online and paper survey was conducted to collect data on characteristics of IGMV

programs and the use of complementary health approaches. We recruited a purposive sample of

safety-net clinicians via national meetings and listservs.

Results: Fifty-seven *clinicians reported on group medical visits*. Forty percent worked in Federally

Qualified Health Centers, 57% in safety-net or teaching hospitals, 23% in other settings such as free

clinics. Thirty-seven respondents in 11 states provided care in IGMVs, most commonly for chronic pain and diabetes.

Nutrition (70%), mindfulness/meditation/breathing (59%), and tai chi/yoga/other movement

practices (51%) were the most common approaches in IGMVs.

Conclusion: Safety-net institutions in 11 states offered IGMVs, providing innovative approaches

to treating chronic conditions.

Keywords: Integrative medicine; community health centers; safety-net providers; chronic disease

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Complementary health approaches are widely used for chronic disease treatment and self-management. Although over one-third of adults in the United States use complementary health approaches, use is lower among those who are publicly insured (25%), uninsured (23%), or living in poverty (21%). Integrative health care, which combines biomedical or allopathic care with complementary health approaches, an improve quality of care by supporting patient preferences and increasing access to non-pharmacological treatment for conditions such as chronic pain and diabetes. Despite growing interest, integrative health care is generally less accessible to uninsured and publicly insured (Medicaid and Medicare) patients who cannot afford high out-of-pocket expenses.

Group medical visits (GMVs), or shared medical appointments,⁸ are now widespread in US primary care and growing in use across medical specialties. GMVs are commonly used for prenatal care⁹ and diabetes¹⁰ and increasingly implemented for chronic pain to increase safe use of opioid medication,¹¹ access to medication-assisted treatment,¹² and availability of non-pharmacological treatments.^{13,14} Though the overall prevalence of GMVs is unknown, the Centering Pregnancy model of group prenatal care is currently practiced in over 500 sites in 43 states.¹⁵ GMVs typically bring five to twenty patients to the same space for medical care, health education, and peer support. Providers bill patients' insurance as they would for a standard medical appointment. GMVs are associated with comparable and in some cases better health outcomes than standard care for prenatal care and diabetes.^{10,16,17} GMVs may also decrease health care costs, in part by reducing emergency room visits.¹⁸⁻²⁰

In the past decade, some safety-net clinics have begun offering integrative group medical visits (IGMVs) that combine biomedical treatment with acupuncture, mind-body techniques, or other complementary health approaches. Small studies suggest IGMVs are a promising approach for chronic health conditions and health promotion more broadly, with positive effects on physical and

mental health. For example, among patients participating in IGMVs for chronic pain, research indicates significant reductions in pain intensity and opioid medication use;²¹ improvements in health-related quality of life, depressive symptoms, and sexual health outcomes in women;²² and reductions in depression and loneliness scores among Latina/o adults.²³ In an ongoing study of IGMVs for chronic pain, Gardiner and colleagues^{14,24} have found improvements in pain levels, depression, and sleep quality, among other outcomes. In a Spanish-language adaptation of this program, Cornelio-Flores and colleagues²⁵ found reduced pain interference, fatigue, and depression among Latina/o adults. A quasi-experimental study of group prenatal care found that pregnancy-related anxiety was significantly reduced in women whose care included mindfulness training.²⁶ Existing research suggests that stress reduction via increased empowerment in IGMVs has the potential to contribute to improved health outcomes.²⁷

Although IGMVs are a growing trend, little is known about how this innovative model of care is being implemented. Most prior studies have been small clinical pilots. These have provided important indications that IGMVs improve individual-level outcomes but do not provide information on the ongoing sustainability of safety-net programs not funded as research. Given the high prevalence of GMVs in safety-net settings and the growth of integrative care nationally, we hypothesized that IGMVs would be present in regions throughout the US. Our scoping survey sought to describe the implementation of IGMVs in safety-net settings, examining which health conditions are treated with this model, which complementary health approaches are most common, and what clinicians view as successful and challenging aspects of the model.

Methods

Study design. This survey is part of a larger, mixed-methods study of IGMVs focusing on safety-net clinics. The study included qualitative data collection, including patient and staff interviews, as well as ethnographic observations at safety-net organizations, which will be reported separately. The survey was developed by the authors to describe the implementation of IGMVs around the US.

Sample. We invited providers to fill out a survey on IGMVs in the US. We distributed the survey at 2016 professional meetings of the Academic Consortium for Integrative Medicine and Health and Integrative Medicine for the Underserved. We also emailed invitations to complete the survey through listservs and social media sites of professional networks of providers, focusing on those involved with care of low-income populations, including Integrative Medicine for the Underserved and an Indian Health Service listserv. In addition, we sent emails to approximately 90 clinics and clinicians whose websites stated that they provided care in integrative medicine group visits.

Additional respondents were recruited through snowball sampling. We chose a purposive, non-probability sampling approach to gather data from a targeted sample of providers with specific expertise in IGMV practice.

Inclusion/Exclusion criteria. Eligibility was limited to health care providers who were a) trained in biomedicine and/or complementary health approaches, and b) were providing care in GMVs. Exclusion criteria included a) being unable to complete the consent process in English or Spanish, or b) not providing care in GMVs, which we defined in the survey as "medical care provided to multiple patients in the same room, when insurance is billed for at least some of these patients. This does not include psychotherapy or behavioral counseling groups, yoga classes, or other programs."

Some questions were answered by all respondents. Other were answered only by those respondents providing care in integrative group medical visits, defined as including all of the following elements:

- Care is provided to multiple patients in the same room.
- A provider bills using ICD-10 codes and documents in the electronic or other medical record.
- At least one complementary health approach (e.g. acupuncture, mindfulness, yoga) is part of most group sessions.
- Patients interact with each other during the group session.

Data collection and informed consent. An English-language questionnaire with open- and close-ended items was developed by the authors using Qualtrics electronic data capture tools. Questions included respondents' demographic characteristics (e.g. ethnicity, age); information about their workplaces (e.g. location, kinds of insurance accepted); and detailed questions about group visit and integrative health programs at their workplaces (e.g. types of conditions treated in IGMVs, which complementary health approaches were offered). Open-ended questions focused on respondents' favorite aspects of IGMVs, greatest challenges, and what they would like to learn about similar programs at other organizations. Potential respondents accessed the web-based survey through Qualtrics and provided informed consent before continuing. For surveys administered at conferences, respondents completed a paper consent form before filling out the survey. The UC San Francisco Institutional Review Board approved all study procedures.

Data analysis. Data from paper surveys were entered into Qualtrics and downloaded along with web-based entries. Of 61 completed surveys, we identified four cases in which multiple staff responded from the same organization; in these cases, we used the first respondent's data, and removed the additional respondent's data from the analysis, yielding a final sample of 57 completed

surveys. We calculated descriptive statistics including mean, median, and standard deviations using SPSS version 24. A total of 37 respondents replied to the open-ended qualitative questions. We analyzed qualitative data using thematic analysis. ²⁸ Two authors (AT-L and PG) independently coded the qualitative responses, then discussed them and agreed on primary themes.

Results

Demographics. A total of 57 providers who provide care in GMVs at distinct sites completed the survey (see Table 1). Mean age of respondents was 50; the sample was primarily female (90%) and White (83%), with some providers from other ethnic groups (11% Hispanic/Latina/o, 7% Asian or Pacific Islander, and 9% other race/ethnicity). Providers had an average of 6 years of experience with GMVs. Forty-two percent were physicians; 16% were nurse-practitioners, nurse-midwives, or physician assistants; and 16% were mental health care providers. Many identified themselves as having multiple professional roles, e.g. physician and yoga teacher.

Characteristics of respondents' workplaces. Forty percent of respondents worked in Federally Qualified Health Centers, 57% in safety-net or teaching hospitals, and 23% in other settings such as the VA or free clinics (see Table 1). Many respondents (35%) worked in California, with others in 10 states including Massachusetts, Ohio, and Oregon (each 9%). The majority of providers (63%) worked in urban areas. Most worked in settings that accepted Medicaid (74%) and Medicare (72%) and provided free or discounted care for uninsured people (53%). Integrative health care was provided at most of these sites; 89% of respondents reported that their workplaces offered one or more integrative health care services outside of IGMVs.

Complementary health approaches in group visits. Clinicians at 37 of the 57 sites offered care in IGMVs. The remaining results are based on this subsample. At the 37 sites that offered IGMVs, providers reported a wide variety of complementary health approaches used as part of IGMVs at their workplaces (see Table 2). Nutrition (70%) and mindfulness, meditation, and breathing exercises (59%) were most commonly included in IGMVs. Tai chi, yoga, or other movement practices (51%); acupuncture (46%), herbs and supplements (43%); and chiropractic, massage, or osteopathic manipulation treatment (30%) were also offered.

Conditions treated in integrative group medical visits. Most sites offered IGMVs to treat multiple chronic conditions, including chronic pain (76%), diabetes (62%), and cardiovascular disease or metabolic syndrome (38%). Some sites also treated substance use and/or mental health (19%) in integrative group visits.

Integrative group medical visit program characteristics. Typical attendance in IGMVs ranged from 4-15 patients, with an average attendance of 7.5 patients per session (see Table 2). IGMV programs were structured in a variety of ways; 57% of IGMVs met weekly, 26% met monthly. In over one-third of IGMV programs, patients were eligible to attend ongoing groups indefinitely; the remainder limited attendance to a set number of sessions. Some sites offered IGMVs in languages other than English: 37% of sites in Spanish, as well as one program in Chinese and another in Korean.

Group education and support programs. Most respondents' clinical sites also offered non-medical group education or support programs (see Table 1). The most common of these were therapeutic movement classes such as yoga or tai chi, and group therapy or mental health support groups (each 40%). Exercise classes such as Zumba were also common (30%), as were cooking classes (28%).

Successes and challenges of integrative group medical visit programs. Respondents provided qualitative data on their favorite aspects of IGMVs, the most challenging aspects, and what they would like to learn about programs at other organizations (see Table 3 for quotes). On the whole, they reported positive experiences with IGMVs, and saw benefits to both patients and clinicians participating in this model of care. Cross-cutting themes included 1) patient-related factors such as recruitment and retention; 2) staff-related factors such as how to staff and bill for the integrative aspect of IGMVs; 3) questions about how to integrate complementary health approaches into biomedical settings; and 4) program sustainability and expansion, including quality improvement related to IGMVs.

The majority of providers responded that a major benefit of IGMVs was how they allowed patients to support each other and share their expertise with one another, which several described as empowering patients. Providers' favorite aspects of IGMVs included positive changes in patient-provider relationships. Providers also noted improvements in patients' physical and mental health, which they attributed to both complementary health approaches and peer support.

The quotes in Table 3 highlight that some of the challenges of implementing IGMVs are the same challenges found in standard safety-net care; however, the addition of complementary health approaches adds specific difficulties. For example, common barriers reported by providers included patient recruitment and retention. Specifically, they emphasized the need for adequate staffing and institutional support for patient recruitment, such as staff to make reminder phone calls to patients and to open facilities during evening hours when more patients are available. In addition, providers highlighted structural challenges, such as access to reliable transportation, that make it challenging to recruit and retain patients in IGMVs. These are challenges that are common in safety-net settings outside of IGMV programs. Specific difficulties of IGMVs included finding and paying staff trained

in integrative health care given the lack of reimbursement for complementary health approaches, as well as finding ways to successfully integrate complementary health approaches in the group setting.

When asked about what they wanted to know about how other organizations implemented IGMVs, recruitment and retention of patients continued to be a dominant theme. Providers also had specific questions about staffing IGMVs with appropriately trained clinicians and support staff and implementing and billing for complementary health approaches. Several providers mentioned their interest in working with others in similar settings to collect data and develop best practices around measuring health outcomes of IGMVs.

We requested that respondents report on IGMVs offered for particular health conditions and using particular treatment approaches, and several commented that our questions about treating specific health conditions (e.g. assuming IGMVs were organized specifically for people with diabetes or chronic pain) did not reflect their programmatic models. Many IGMVs are designed to treat multiple health conditions at once, as is true for integrative health care more broadly. Such an approach is difficult to measure, and points to the need for rigorous, mixed-methods approaches to studying integrative health care interventions.

Discussion

Our research demonstrates the emergence of a growing model that increases access to integrative health care, particularly in safety-net settings. IGMVs appear to be a more widespread innovation than we had previously assumed. We found that clinicians from a broad range of professional backgrounds are providing both GMVs and IMGVs in safety-net settings that serve uninsured and publicly insured patients, using this model to offer integrative health care that low-income people struggle to afford when it requires out-of-pocket payment. National trends indicate that people with lower income or less education are less likely to use complementary health

approaches.³ We found that IGMVs are geographically dispersed throughout the US, but the number of clinics offering them remains unclear given our non-representative sample. Our findings indicate considerable interest in and enthusiasm for this model of care among clinicians around the country, and that IGMVs include a wide range of complementary health approaches and commonly treat patients with chronic conditions including diabetes and chronic pain. Consistent with the growing body of research on integrative health services in safety-net settings,^{25, 29-31} clinicians in our study reported that IMGVs are increasing access to integrative care and peer support, benefitting patients in multiple ways.

We found that IGMV implementation is complicated in ways that are consistent with existing literature on GMV program implementation and safety-net care more broadly. Clinicians reported that some of the challenges to starting and sustaining group visit programs include obtaining adequate support from their organizations. For example, IGMVs require clinicians who are capable of facilitating a group-based care model as well as using or teaching complementary health approaches. In addition, clinic staff need time to recruit patients, develop curricula, and complete other tasks that make the program possible.

IGMVs are heterogeneous in their format, and there is even a great deal of variation between programs at each site. For example, some sites reported that they offer short-term IGMV programs for certain health conditions, as well as ongoing programs that patients may participate in for several years for other health conditions. The most commonly used complementary health approaches in IGMVs were nutrition and mind-body practices such as mindfulness meditation, forms of treatment that do not need to be taught by a licensed provider. Though GMVs and specifically IGMVs are increasingly common, guidelines for billing both public and private insurance for care provided in groups remain unclear. 33,34 Despite the Affordable Care Act's requirement that health insurance companies not discriminate against any licensed provider, 35 there is currently

minimal reimbursement for care provided by licensed non-biomedical providers such as acupuncturists and naturopathic doctors. Given the lack of insurance reimbursement for most complementary health approaches, it is unsurprising that the approaches most commonly used in IGMVs are those that can be offered by biomedical providers with some specialized training or practice. Some respondents to our study reported on IGMVs that include other licensed providers such as acupuncturists or chiropractors; however, in our qualitative results clinicians reported difficulty finding funding to pay these providers.

Our study found that over 75% of sites with IGMVs were using this model to deliver integrative care for chronic pain, and over half provided diabetes care in IGMVs. There is a strong research base for diabetes GMVs, ^{16,38} and integrative health care may provide additional benefit to patients with diabetes. All authors of this article have ongoing qualitative and mixed-methods projects examining group-based integrative care for chronic pain. ^{14,39,40} These projects suggest that such approaches are a promising innovation that may help reduce or eliminate the use of opioid medication and allow organizations to comply with Joint Commission requirements to offer non-pharmacological treatment for chronic pain. ⁴¹ In addition to offering GMVs in which they bill patients' health insurance for the medical care provided, most sites offered additional free or low-cost group activities including evidence-based complementary health approaches such as yoga and tai chi. ³¹ Many safety-net clinics have also integrated primary care and mental health care services, and these efforts are visible in the many sites offering group therapy or mental health support groups. ^{42, 43}

This scoping survey points to the need for additional quantitative and qualitative research on IGMVs as well as broader issues of low-income people's access to integrative health care. One example would be a national survey of all Federally Qualified Health Centers to assess whether and how they are implementing integrative health care, GMVs, and IGMVs specifically. In addition,

there is a need for research on best practices for making evidence-based integrative health care accessible to low-income people. For example, clinicians participating in this survey would benefit from the development of best practices for a qualified, interdisciplinary workforce to provide care in IGMVs, including support staff such as medical assistants and health educators, as well as clinicians. Broad implementation of IGMV models would be more feasible if both public and private insurers provided reimbursement for a range of licensed health care providers such as naturopathic doctors and massage therapists. Such reimbursement would not only allow safety-net clinics to hire integrative health care providers but also support the infrastructure needed at the clinic and organizational level to make these programs feasible and sustainable.

Limitations

This study had a small, targeted sample, limiting the generalizability of the findings. There is a potential for bias in favor of GMVs, because we specifically sought clinicians who were currently providing care in GMVs. It is difficult to determine how many organizations are offering IGMVs as clinics rarely advertise these programs on their websites or publish information about them elsewhere.

A final limitation is that the survey design did not explicitly ask clinicians to name their workplaces, to protect their anonymity. We identified cases of multiple survey respondents reporting on the same organizations and removed these four respondents from the analysis, but it is possible that other overlaps were missed.

Conclusion

Despite these limitations, this study uniquely contributes to our knowledge of IGMVs in safety-net settings by describing the structure and scope of care provided in IGMVs. Though other

studies have reported on the outcomes of specific IGMV programs (14,21–23), this is the first study we are aware of to look at existing IGMV programs across multiple organizations. IGMVs typically provide multidisciplinary care that aims to treat multiple health conditions at once, an approach that is well-suited to the needs of safety-net patients and clinicians. Our findings show that despite extremely limited insurance reimbursement for complementary health approaches such as acupuncture and massage, safety-net clinicians are creatively increasing access to such treatment by offering it alongside biomedical care in IMGVs. Survey responses indicate that such programs can be used to manage some of the conditions in which major health disparities are present, such as diabetes and chronic pain, providing innovative approaches to treating these conditions and increasing access to complementary health approaches for low-income people receiving care in safety-net settings.

	N (%)	
Age in years ± Standard Deviation	50 ±10	
Gender		
Male	6 (10)	
Female	51 (90)	
Race/ethnicity		
White	47 (83)	
Hispanic/Latina/o	6 (11)	
Asian or Pacific Islander	4 (7)	
Other (including African American, Native American)	5 (9)	
Professional Role ²		
Physician (MD or DO)	24 (42)	
Nurse-practitioner, physician assistant or nurse-midwife	9 (16)	
Mental Health Provider (psychologist, licensed social worker)	9 (16)	
Acupuncturist	5 (9)	
Other (including yoga teacher, group program coordinator, herbalist)	20 (35)	
Average Years of Experience with Group Visits ± SD	5.9 ± 6.3	
Workplace		
Federally Qualified Health Center	23 (40)	
Teaching Hospital/clinic	26 (46)	
Safety-Net Hospital	6 (11)	
Other (including free clinic, Indian Health Service, private practice)	13 (23)	
State		
California	20 (35)	
Massachusetts	5 (9)	
Ohio	5 (9)	
Oregon	4 (9)	
Other ³	23 (40)	

² Participants could select multiple responses. Totals may be over 100%

³ Other states include: MN, NY, FL, WI, CO, NE, MI, PA, KY, IL, TN, NM, TX, WA, Washington DC

Table 1: Characteristics of Participants and Workplaces (N=57)			
	N (%)		
Geographic Area			
Urban	36 (63)		
Suburban or small city	13 (23)		
Rural	3 (5)		
Types of Insurance Accepted			
Medicaid	42 (74)		
Free or discounted care for uninsured	30 (53)		
Medicare	41 (72)		
Private Insurance	37 (65)		
Veteran's benefits	6 (11)		
Integrative Medicine Services Offered Outside of Groups (e.g. acupuncture, meditation)	51 (89)		
Other Group programs offered			
Therapeutic movement (e.g. yoga, tai chi)	23 (40)		
Group therapy or mental health support	23 (40)		
Physical activity classes	17 (30)		
Peer support	15 (26)		
Cooking classes	16 (28)		
Substance abuse treatment	11 (19)		
Arts or activity groups	9 (16)		

Table 2. Characteristics of Integrative Group Medical Visits (IGMVs	N=37
Complementary Health Approaches offered in IGMV	N (%)
Nutrition	26 (70)
Mindfulness, meditation or breathing	22 (59)
Tai chi, yoga, or other movement	19 (51)
Acupuncture	17 (46)
Herbs or supplements	16 (43)
Chiropractic, massage, or osteopathic manipulation treatment	11 (30)
Conditions Treated in IGMV	
Chronic pain	28 (76)
Diabetes	23 (62)
Cardiovascular disease or metabolic syndrome	14 (38)
Cancer	8 (22)
Mental health and/or substance use	7 (19)
Prenatal care	8 (22)
Pediatrics	6 (16)
IGMV Languages Offered	
Spanish	15 (40)
Korean	1 (2)
Chinese	1 (2)
Estimated number of patients attending IGMV, mean (range)	7.5 (4-15)
Frequency of IGMV Sessions	
Weekly	57%
Every other week or twice a month	8%
Monthly	26%
Other	8%
Number of IGMV Sessions Patients are Eligible to Attend	
Two to five	26%
Six to ten	29%
More than ten	7%
Ongoing/indefinite	38%

Table 3: Themes and Participant Quotes from Qualitative Survey Questions						
Primary Themes:	Patient Factors	Integrative Health Care	Staff Factors	Program Sustainability and Growth		
Most challenging aspects	Patients missing appointments: "When patients are ill or they have transportation or health challenges and they miss a visit, it affects the whole group and the group dynamics."	Integrating complementary health approaches: "figuring out the best way to integrate mindfulness skills-building - which is mostly taught in a didactic model – into CenteringPregnancy, which is very intentionally a facilitative (not didactic) model."	Finding and paying for staff trained in complementary health approaches: "What has been most challenging is to train our staff in the integrative modalities. We have rarely had the financial resources to hire others into the system with the expertise. Nor had the system been willing to pay for training in integrative modalities."	Program Sustainability "maintaining appropriate administration/human resources support" "recruitment and programs sustainability, i.e. nursing and front office support."		
Favorite aspects	Patients supporting each other and sharing expertise: "The connection it generates for patients that would usually be isolated." "Witnessing peer to peer learning."	Seeing patients' health improve, integrating complementary health approaches: "Patients actually get better and are able to significantly increase the quality of their lives as well as often diminish the pain they are experiencing. I could never get these results in a 1:1 traditional western medicine format of a doctor-patient visit."	Positive changes to patient-provider relationships: "How the (power) dynamic between patient and provider is dissolved. Happier patients and happier providers." "I enjoy working as a provider with a group—different dynamics than 1:1 with patients."	Programs empowering patients: "It has also been my privilege and pleasure to be able to integrate community members as co-facilitators of groups - and to see the group participants blossom ina truly culturally appropriate / sensitive atmosphere."		
Want to learn from other programs	How to recruit and retain patients: "How to manage enrollment and retention in [a safety-net] population with many barriers to care."	How to integrate complementary health approaches: "Protocols being used by group acupuncturists" "Very interested to know how they do the integration. Bring in teachers or specialists? Train their staff? Also interested to know what modalities were the most well received (popular) among the different populations."	Staffing and Billing for Group Visits: "How to serve patients with high co-pays." "How to bill, who can bill." "Is there a limit to how often [patients] can come and be billed for [group visits]?"	How to measure outcomes: "I would love to see a collective of people gathering data on these groups together, from all their different sites."		

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Chapter 2, Part 2:

Commentary on "Integrative Group Medical Visits: A National Scoping Survey of Safety Net Clinics"

In this commentary I discuss several themes that the survey research process and findings bring attention to, including co-optation and medicalization; challenges of definition and boundaries in IGMVs, and limitations and future directions of this research. I will address each in turn by drawing on social science literature to justify my theoretical orientation and research methods. The goal of this piece is to provide sociological commentary on the survey component of the dissertation.

With the survey conducted for this dissertation, I sought to describe the uptake of an access and treatment intervention focused on vulnerable populations receiving care in safety-net settings. This intervention is a combination of two strategies with potential to address health care inequalities: group medical visits and integrative health care. I designed the survey to reach as many safety-net IGMV sites as possible, to gather information about the providers who are implementing these programs, and to assess the variation among IGMV programs. The survey findings are an initial examination of the national IGMV landscape, asking, where are IGMVs happening? What health conditions are they being used for? What kinds of complementary health approaches are common and appear feasible to implement in this setting? This survey was designed to be accessible and comprehensible to clinician-participants (although as I will show, that was not necessarily the case). At the end of the survey, I asked participants if they would like to receive the results; nearly all said they would. Most also agreed to do phone interviews to share additional information about their programs, though I did not complete these follow-up interviews as part of the dissertation research.

Integrative health care, co-optation and medicalization

Social scientists have several closely related critiques of integration that are relevant to this survey. Within the framework of biomedical hegemony, the settings I am studying certainly could be described as co-optation of complementary health approaches by removing them from more traditional contexts and integrating them into biomedical settings. Indeed, the fact that I chose to study complementary health approaches within medical settings rather than other contexts further reifies this biomedical co-optation. These critiques offer important concerns; however, they do not provide solutions to issues of limited access to complementary health approaches. Though social scientists have acknowledged how the US capitalist health system shapes access to complementary health approaches, the critiques I reference here do not have a primary focus on how socioeconomic status determines access to complementary health approaches (Baer 2004; Gale 2014).

At the health systems level, the very concept of integrative medicine has been seen as biomedicine medicalizing or co-opting other systems of healing (Baer 2004). At the individual level, social scientists have pointed to integrative medicine as an example of biomedicalization, specifically the growing imperative that people work constantly to improve their health (Clarke et al. 2009; Kellner and Wellman 2000). A central argument in these critiques is that integration results in medicalization and strengthening of biomedical hegemony (Sointu 2012). Others use the terms co-optation and medicalization to describe how complementary health approaches were taken up by some biomedical clinicians and institutions in response to their own patients seeking treatment from other kinds of providers (Baer 2004: 20). Baer (2004) calls this a process of co-optation and argues that biomedical practitioners, the NIH, and health insurance and pharmaceutical companies were motivated to develop integrative health care by both patient demand and cost-effectiveness of complementary health approaches. He describes how beginning in the 1970s, some MDs and osteopathic doctors "began to incorporate alternative therapies into their practices" in response to

seeing their high-SES patients seek care from complementary providers, and that even before physicians began this process, nurses, physical therapists, and other biomedical practitioners were claiming to take a holistic approach to care (2004: xiii). Baer and others argue that when biomedical clinicians integrate complementary health approaches with biomedicine (whether an MD training in acupuncture or homeopathy, or hiring complementary practitioners into a biomedical institution), they decrease the likelihood that their patients will seek these services elsewhere.

Other social scientists critique integrative health care for ignoring unequal power dynamics across race, class, and sex (Adams et al. 2009), arguing that an integrative approach will thus "maintain modernist and colonial structures and perpetuate social inequalities rather than challenge them" (Gale 2014:812). Hollenberg and Muzzin, in what they describe as an anti-colonial approach, state three related concerns about integration: "(a) the devaluing of non-biomedical health knowledges; (b) accepting only biomedical evidence; and (c) the creation of a biomedical monolithic worldview" (7). They argue that integration has the potential to result in biomedicine taking the pieces of complementary health approaches that most easily fit into the biomedical paradigm and practice, while diluting or erasing elements such as indigenous knowledge and treatment connected to spirituality. Such critiques show how in the process of [bio]medicalization, integrative health care dilutes and assimilates complementary health approaches; for example, eliminating the spiritual components of yoga or avoiding the use of Chinese herbal medicines while permitting acupuncture, out of concerns about organizational liability (Baer 2004; Budd and Sharma 2002).

The growing but still disputed legitimacy of complementary health approaches speaks to the continued dominance of biomedicine, both when it keeps out other approaches to health, and when it includes them through co-optation. Baer and others have suggested that such an approach often treats complementary health approaches as a set of tools rather than full-fledged approaches to healing (2004).

For low-income people, providing complementary health approaches in biomedical settings may increase patients' access to such treatments by decreasing their out-of-pocket cost. The development and implementation of integrative medicine group visits for low-income people could be seen as an example of co-optation of integrative medicine, or an example of stratified biomedicalization (Clarke et al. 2009), in which different treatments are seen as suitable for different people. My findings show how the development of integrative health care may be a response to the limitations of U.S. health care, including lack of insurance coverage for complementary health approaches and extremely brief appointments even for complex patients. However, they also suggest, as previous research has, that co-location and integration of complementary health approaches with biomedical care is also beneficial for some patients (Penney et al. 2015).

In this broader study, I find that some providers and low-income patients see integrative group medical visits as comparable to or better than the care that people with more money have access to. Though I did not ask staff or patients about cooptation, it was an emergent theme in interviews with clinicians and other staff members. My qualitative research found that many IGMV staff are sensitive to the possibility and reality of cooptation, yet their pragmatic interest in expanding access to care overtakes concerns about cooptation. They do the work of classifying their integrative health care efforts in ways that allow them to exist within biomedicine; for example, billing Medicaid or Medicare for 10 individual primary care visits, but not noting in the billing process that these patients were receiving acupuncture in a room with other patients. I approach these findings from a symbolic interactionist perspective, privileging how people create meaning through interactions and therefore are reflexively aware of their circumstances. Participants' perspectives are heavily shaped by the confines of US health care, yet many see current efforts at integration as a pragmatic step towards expansive access to complementary health approaches for all. They know the limitations of US health care, and they know what it takes to provide access, and for this reason I take their

accounts seriously though they in some ways conflict with the critiques above. IGMVs may expand access in important ways, even as they coopt and medicalize complementary health approaches.

Defining 'Integrative Group Medical Visit'

This survey reflects some the specific challenges of defining and measuring group medical visits, integrative health care, and the combination of the two (integrative group medical visits). Which terms to use is in part a stylistic and temporal question, yet as sociologist Gale writes, "the naming process is a glimpse into the complexities of power and history that characterize the field" (Gale 2014). She and others point out that these terms reflect a bias towards the dominant approach—biomedicine--and ongoing movement towards acceptance by biomedicine, by naming all other health approaches as alternatives or complements to biomedical treatment (Cohen 2007; Kiesser et al. 2006). Processes of definition have both programmatic and policy implications.

I chose the term "integrative group medical visit" to reflect the language I expected would be used by my clinician participants, who are familiar with both integrative health care and group medical visits. Group medical visits are typically defined expansively to include single-session group education sessions with a clinician (Romanelli et al. 2017), cohort-based programs with limited time frames, such as the CenteringPregnancy model (Rising and Quimby 2017), and drop-in programs where patients may attend regularly or irregularly over many years (Geller et al. 2011b). Producing evidence of success for such a wide range of programs proves unsurprisingly challenging, though as I have cited above, there is health outcomes research on a variety of models, including GMVs for bariatric surgery follow-up (Kaidar-Person et al. 2006), Hmong-speaking patients with diabetes (Culhane-Pera et al. 2005) and dental care embedded in group prenatal care (17). Informal conversations at my research sites revealed that some clinicians include all GMVs under the banner

of integrative health care. Integrative health care is an inclusive term that can encompass a wide range of treatments, from acupuncture and massage which have a relatively accepted evidence base, including for chronic pain (Crawford et al. 2016; Vickers et al. 2017), as well as more controversial complementary health approaches including homeopathy (Dossett et al. 2016) and energy medicine (Dufresne et al. 2015). What I have termed "integrative group medical visits" combine GMVs and integrative health care and, as the survey data shows, are in themselves a label for a heterogeneous group of programs.

Defining "integrative group medical visit" was a topic of conversation with most of the clinicians and other program staff I spoke with. I defined IGMV in a way that was consistent across all elements of this project. Though this seemed reasonably straightforward, there proved to be questions of definition and changes over time and place in what might be considered integrative. This is unsurprising given the continuing contestation about what language to use for this kind of care (Gale 2014). In interviews, some experienced clinicians pointed out that 15 or 20 years ago, a nutrition-focused program might have been included, but now nutrition is more widely accepted as a part of biomedicine. Would a nutrition program with discussion of supplements and herbal remedies count as integrative health care? How about expressive arts therapy with a doctor in the room—is that integrative medicine or mental health care? Is mindfulness meditation taught by a psychologist a group medical visit, or group therapy? These challenges of classification point to the difficulty of finding appropriate metrics to measure and assess the outcomes of a heterogeneous set of IGMVs.

Though I was not attempting to evaluate these programs or their outcomes, it proved challenging to develop appropriate questions to simply describe them. This survey included complementary health approaches as they are currently allowed to exist within biomedicine: the kinds of care that biomedical hegemony will accept and include, in certain locations and at this specific time. For example, I provided respondents with checklists of complementary health approaches I thought their sites were likely to offer, including acupuncture, massage, and yoga, but

not other approaches like energy medicine or traditional care providers such as curanderos or shamans. I also asked questions about whether the clinician's workplace offered IGMVs for a list of specific health condition, including diabetes, chronic pain, and cancer. Some clinicians wrote that it was difficult to answer these questions because their programs did not divide patients by health condition; while there were patients in IGMVs with all of these conditions, they were joined by patients with a variety of other health conditions too.

This study uniquely contributes to understanding of IGMVs in safety-net settings by describing the structure and scope of care provided in IGMVs around the US. The results of this survey show that IGMVs are not limited to politically progressive urban areas. Though the majority of clinicians completing the survey worked in California or Massachusetts, responses also arrived from Nebraska, Tennessee and Colorado, among other states. Results also expand on my qualitative findings that chronic pain treatment is a major area where IGMVs are being implemented. IGMVs typically provide multidisciplinary care that aims to treat multiple health conditions at once, an approach that demonstrates the blurry boundaries between integrative health care and medicine.

Survey Limitations

This dissertation includes both quantitative and qualitative research on IGMVs, drawing on survey data, interviews with both patients and staff, and observations of group visits. Multiple kinds of data revealed tensions related to integrative health care and complementary health approaches, and the shifting terrain of what kinds of treatment are being offered alongside biomedicine. This survey is a response to existing pilot studies of health outcomes in IGMVs, including at organizations included in the study, and lays the groundwork for future quantitative research. However, there are several important areas that this survey does not address, including patient health outcomes in IGMVs, negotiations at the organizational and policy levels that make IGMVs

possible or prevent their expansion, and understanding of what motivated the development of IGMVs. The survey findings point to a need for additional mixed-methods, multi-sited research that examines elements of IGMVs including patient-level and group-level outcomes, including health outcomes, quality of care as defined by patients, providers, and organizations, and access to care (often touted as a benefit of group visits, see for example Bartley and Haney 2010).

Understanding the landscape of IGMVs in the safety-net will make it possible to use practice-based research or other collaborative efforts to look at outcomes across sites. From a theoretical standpoint, this survey did not address whether providers had concerns about integrative health care as potentially medicalizing, co-opting or appropriating complementary health approaches, and how they addressed these concerns. Such questions were raised by some IGMV staff in my qualitative research but were not a primary area of exploration.

Future Directions

This scoping survey sought to find and describe IGMVs throughout the US. A larger, more developed version of the study would include collaboration with the National Association of Community Health Centers to reach out to all community health centers nationally to seek a representative sample. In addition, it could include collaboration with the Centering Healthcare Institute, whose model of group prenatal care is widely used, particularly in community health centers. For this larger study, I would conduct participatory research with a group of clinicians, biomedical and otherwise, to design questions that encompass the heterogeneity of IGMVs. In addition, I would include questions aimed at clinicians' perspectives on expanding access to integrative health care, attempting to understand whether they are attentive to critiques of medicalization and co-optation and/or see alternate, emancipatory possibilities in increasing access to these forms of care. This topic was raised repeatedly in clinician and staff interviews, but not in

interviews with patients. A larger mixed-methods project would include discussion with patients about complementary health approaches in and outside of biomedical settings, to gain an understanding of patients' preferences, practices, and beliefs related to integrative care.

Group medical visits have particular benefits for vulnerable populations, including less hierarchical patient-provider relationships and opportunities for peer support and advocacy, as well as increased time for care interactions. Integrative health care, too, has strengths that are especially important for vulnerable populations. Biomedicine typically focuses on symptoms and often treats each health condition separately. In contrast, integrative health care seeks to treat whole individuals and at times communities. As I will explore in the following articles, this approach has the potential to support not only physical health but also mental health in community context, an approach much-needed by patients living with individual and community trauma.

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Chapter 3: Group Medical Visits as Participatory Care in Community Health Centers

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Group Medical Visits as Participatory Care in Community Health Centers

In this article, I examine group medical visits, a clinic-based intervention that aims to improve patient health by combining clinical care, health education and peer support. Research shows that health care inequalities are reproduced through the interplay of interpersonal, institutional, and structural factors. I examine changing social relations made possible by group visits, including peer support and an expanded role for patient knowledge. The qualitative data presented here are part of a mixed-methods study of how group medical visits and integrative medicine are combined and implemented for low-income people with chronic conditions. I find that patients take active roles in each other's care, supporting, challenging, and advocating in ways that shift patient-provider relationships. Such shifts demand reflection about what kinds of knowledge matter for health. Health care encounters can reproduce inequality for marginalized patients; this study suggests group visits can restructure patient-provider encounters to interrupt healthcare inequalities.

Introduction and Background

Existing research shows that health care inequalities are reproduced through the interplay of interpersonal, institutional, and structural factors in care delivery. At the interpersonal level, recent research shows that clinician racial bias, whether implicit or explicit, is associated with poor treatment for African-American patients (Hoffman et al. 2016; James 2017). At the institutional level, literature describes how the typical structure of medical encounters plays a substantial role in the production of health care inequalities (Cooper and Roter 2003; Waitzkin 1993). Despite efforts towards increased clinician empathy (Kelm et al. 2014) and patient-centered care (Constand et al. 2014; Dubbin, Chang, and Shim 2013), clinicians are faced with ever-shorter visits with their patients (Fiscella and Epstein 2008; Konrad et al. 2010). Reflecting reimbursement pressures, the trend towards short visits has been found to "exacerbate disparities in health care due to competing demands, miscommunications and activation of unconscious physician stereotypes" about low-income people, people of color, and those with limited English proficiency (Fiscella and Epstein 2008: 1843), and clinicians have argued that patient-centered care cannot be implemented in brief visits (Maldonado 2013). Among other structural concerns, low public insurance reimbursement rates create disincentives for clinicians from caring for low-income patients (Polsky et al. 2015).

Group medical visits, a clinic-based intervention, aim to improve patient health and interrupt the reproduction of health care inequalities through a combination of medical care, education, and peer support. This article is part of a larger study of integrative group medical visits, which add complementary health approaches such as acupuncture or yoga to existing group visit models. Where medical visits have traditionally been structured as one-on-one interactions between patient and clinician, the emerging phenomenon of group medical visits allows clinicians to conduct visits with multiple patients at once. These new routines and processes enable patients to receive care

together, a rare form of intervention into the structure of clinical interaction. Group medical visits, also known as shared medical appointments (Noffsinger 2012), are now widespread in U.S. primary care and are growing across medical specialties as well as internationally (Andersson, Christensson, and Hildingsson 2012; Kaidar-Person et al. 2006; Klima et al. 2016). Commonly used for prenatal care (Lathrop 2013), diabetes (Burke and O'Grady 2012), and chronic pain (Geller et al. 2015), among other conditions, these visits typically bring five to twenty patients to the same space for medical care, health education, and peer support. Depending on the group visit model, the same patients may be present at every session or patients may drop in; regardless, sessions typically last one to two hours and include group conversation as well as individual medical care. The clinician(s) may conduct medical visits semi-privately and one at a time or in a circle with other group members listening and even participating (Barud et al. 2006; Rising 1998), and typically bill insurance companies as they would for an individual visit. Group visits are designed to improve health outcomes, increase access to care, and give patients opportunities to support each other; this peer interaction is an essential part of most models (Geller et al. 2015; Noffsinger 2012; Rising 1998). Integrative group medical visits share most elements of these other programs, with the addition of complementary health approaches provided alongside allopathic medical care.

Many observational studies and a small number of intervention trials have found that patients participating in group visits have comparable if not better health outcomes than standard care for a variety of health conditions, including prenatal care and diabetes (Edelman et al. 2012; Lathrop 2013; Novick et al. 2011). Existing qualitative literature on group medical visits has typically used interviews with patients and/or clinicians and suggests that the group setting can result in a relationship between patients and clinicians that are distinct from the typical power dynamic relationship in standard care and can increase both groups' satisfaction with care. For example, Lavoie and colleagues (2013) argue that group visits create contexts in which patients and providers

"co-produce" a clinical encounter that is distinct from individual care. This co-production allows providers to understand the social context of patients' health, and allows patients (in their study, primarily low-income Canadian adults), to feel safer and more trusting of clinicians. They conclude that "[w]hile power relations between providers and patients remain in [group visits], the group process appears better able to mitigate the impact of power differentials" (Lavoie et al. 2013). In a review of research on the Centering Pregnancy model, Massey and colleagues claim that group prenatal care "reduces the paternalism so ingrained in our health care system and strengthens the provider-patient relationship by making them partners in care. The group [dynamic] reduces the power differential between a woman and her health care providers" (2006: 288). They argue that both providers and patients bring relevant knowledge and experience into the group visit setting. In a review of qualitative and mixed-methods literature on group visits, Kirsh and colleagues (Kirsh et al. 2017) found that group visits can lead to more equitable patient-provider relationships than standard care, suggesting the presence of multiple patients and the extended amount of time patients and providers spend together allow for more informal and trusting relationships and even friendships. These studies did not include observation of group visits, which allows for further understanding of the processes by which patients participate in their own and each other's care; in addition, Lavoie and colleagues examine the Canadian context, in which health care is more accessible to marginalised populations than in the United States.

Many advocates of group visits view them as a way to reduce health disparities and address injustice within health care by improving access to care and empowering patients (Geller, Dube, and Kowaleski 2010; Rising 1998). Group visits have been implemented in a variety of settings including private practice and large health care systems, and community health centers. The four organizations in this project are community health centers (also known as Federally Qualified Health

Centers), which provide some care in group visits but the majority of care in individual visits that last 15 minutes or less.

Community health centers were developed out of the Civil Rights Movement with a focus on addressing social determinants of health in addition to providing primary care. These organizations receive federal funding to support their mandate of caring for low-income people, including the uninsured, many people of color, people with disabilities, undocumented or recent immigrants, and others who live with ongoing trauma or social isolation. They retain some of their original emphasis on community participation; many are at the forefront of innovations such as patient-centered care models, and offer services not traditionally part of medical care such as free exercise classes or access to healthy food (Lefkowitz 2007).

Social marginalization and other forms of chronic stress are strongly associated with morbidity and mortality from chronic conditions (Hilliard et al. 2016; Lee, Tsenkova, and Carr 2014; Sinnott et al. 2015), including conditions such as diabetes and chronic pain that are commonly addressed in group visits. Researchers and policy advocates aligned with the Black Lives Matter movement have called for universal access to health care and "reparations focused on healing ongoing physical and mental trauma" (Movement for Black Lives 2016). They demand increased investment in health care for all, urging organizations to work towards community control of health services by those who have suffered most from poor quality and discriminatory care, including Black Americans, undocumented immigrants, and transgender people. Their call is echoed by patients and clinicians who participated in this research, who spoke clearly to the effects of physical and mental trauma on the health of individuals and communities, and the potential for truly therapeutic care—including group visits—to help people move from suffering and isolation towards individual healing and community participation. Some of the programs in my research normalize inclusion of people

with physical disabilities and mental illness, as well as integration of undocumented immigrants and people across racial and ethnic backgrounds.

This article draws on social science theories of multiple knowledges to help explain patterns of interaction between patients, their peers, clinicians, and other health care staff. Medical care has typically been structured with doctor/expert and patient/layperson as the two central roles and forms of knowledge, and a general assumption that the clinician is the expert in any interaction. Davis-Floyd and St. John (Davis-Floyd and St. John 1998) argue that this is a necessary element of the dominant technocratic approach to medicine, but results in a loss of authority and responsibility for the patient. Social scientists have disagreed about whether and how lay/patient knowledge about health reflects a form of expertise. Popay and Williams argue that "...experience is checked against life events, circumstances, and history, [and] lay people acquire an 'expert' body of knowledge, different from but equal to that of professionals" (Popay and Williams 1996). Prior (Prior 2003) counters that the rise of "patient-centered care" and attention to patients' perspectives on health have eroded the dominance of professional knowledge, and that lay knowledge is overvalued in medical sociology. Related research on authoritative knowledge has focused on health-related experiences outside of clinical settings. Social scientists have found that some people develop "syntheses of biomedical, lay, and bodily knowledge" in an attempt to reconcile medical advice with lived experience (Millard and Kingfisher 1998), and that these syntheses of knowledge have substantial effects on eating and other health-related practices (Potter et al. 2016). Writing about ethics of care among people struggling with addiction and their families, Garcia describes how laypeople's medical and technical knowledge changes their experience of health and illness, and argues that care from peers and families is essential when medical and other institutions neglect to provide needed care (Garcia 2010).

Though group medical visits are being implemented in community health centers across the U.S., research has rarely examined the experiences and relationships of patients and clinicians participating in this form of care across multiple sites and health conditions (Kirsh et al. 2017). In this article, I highlight how receiving care together can shift the traditional patient-provider power dynamic and create relationships of care between patients, potentially interrupting the reproduction of inequalities in health care. Using observation and interview methods, I focus on low-income adults, primarily people of color, receiving care in four U.S. community health centers. I examine the changing social relations that accompany these new forms of care, including greater patient participation and mutual support, and an expansion of the role of patient knowledge in the clinical setting. In many group visits, health care providers and patients act to refute hierarchical relationships and unequal care practices that are common in standard medical care. As I show below, the structure of group medical visits allows providers to utilise extended time with patients and the presence of peers to make patient knowledge central to the care process. In the course of conducting group visits, many providers come to view patient knowledge as a form of expertise that can be leveraged and shared as a form of care that benefits other patients in the room (Kennedy et al. 2009; Lavoie et al. 2013).

Methods

This article is part of a larger, mixed-methods study that examines how group medical visits and integrative health care (also known as complementary and alternative medicine) are being combined and implemented for low-income people with chronic conditions in the U.S. Data was collected at four community health centers in the San Francisco and Boston metropolitan areas

between March and August 2016.⁴ These organizations include county-run health clinics as well as non-profit community health organizations. All offer primary care at multiple sites, and serve low-income families, including uninsured people and recent immigrants. These organizations were chosen for their robust group medical visit programs; all have offered group visits for at least 10 years. Most began by offering the Centering Pregnancy model of group prenatal care and/or group visits for diabetes care and have since expanded to offer a variety of group visits including some that incorporate complementary health approaches such as yoga, acupuncture or meditation. None of the organizations has a specific focus on integrative health care; rather it is one of several innovative approaches to care such as integrated behavioral health care, food access programs, and exercise classes that are offered at some clinic sites. Though integrative health care is not the explicit focus of this article, it will be further explored in future publications.

Data for the project include ethnographic observations of group visits, as well as qualitative interviews of both patients and staff. Interviews and participant observation were conducted in English and Spanish. In conversation with clinicians involved in directing or coordinating group visit programs at each organization, I identified clinicians and other staff of integrative group visit programs as potential participants. All staff involved in integrative group visits were invited to take part in a one-on-one semi-structured interview and be observed providing care in a group visit. The content and scope of staff interviews was iteratively adjusted to explore themes that emerged in ethnographic observation of group visits and in ongoing patient interviews. A total of 28 staff interviews were completed by phone or in person; staff members included physicians, health educators, and other clinicians and support staff. Participants provided written consent and received a \$25 gift card. Interviews were audio-recorded and transcribed verbatim.

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⁴ From 2009-2015, I developed and facilitated group medical visit programs at one of these organizations but was no longer employed there at the time of data collection.

I conducted participant observation of 20 different integrative group medical visits at eight clinic sites across four organizations; observations were intended to collect data on patient-provider and peer relationships and serve as an opportunity to recruit patient participants in this study. Observation focused on interactions among patients and between patients and providers; in addition, I was sometimes invited to participate in group activities such as yoga or discussion. Eight groups focused on chronic pain; the remainder included groups focused on treatment modalities, including yoga and acupuncture, as well as groups focused on population or health condition, including men's health and opioid addiction. Programs varied tremendously in duration, frequency of meetings, and stability of membership; some accepted new patients at each session, others served the same patients over time. Group visits in this study generally included multiple staff, including a licensed clinician (typically physician or nurse-practitioner), as well as one or more support staff such as a health educator or medical assistant. Throughout the article, I use the term "clinician" to refer to licensed providers, and "staff" to refer to health care workers more broadly, including clinicians. All patients and staff provided verbal consent at the time of observation; observations were recorded in detailed field notes.

While observing group visits, I typically invited all patients to participate in individual interviews. Eligibility criteria included age 18 or older, verbal fluency in English or Spanish, and willingness to participate in one semi-structured interview about their experience with integrative group visits. I interviewed 25 patients by phone or in person; participants provided written consent and received a \$25 gift card. Demographic data was collected through a brief questionnaire.

Interview transcripts were analyzed using grounded theory methods, including coding and memoing (Charmaz 2006; Clarke 2005). Field notes and interview transcripts were coded using the qualitative data management software Dedoose. I developed a list of codes and sub-codes in Dedoose, iteratively adjusting the code list as additional materials were coded and refined the list of

codes through ongoing memo writing and discussion with colleagues of emerging themes in the data. Emerging themes related to interaction, relationships, and how patients and providers participate in care were used for this article; additional themes will be further explored in future manuscripts. Constructivist grounded theory, as practiced by Charmaz and others, "sees both data and analysis as created from shared experiences and relationships with participants and other sources of data" (Charmaz 2006: 130) and allows for examination of the co-construction of this approach to care by the stakeholders involved. Alongside grounded theory methodology, the decision to incorporate both patient and provider perspectives is framed by a theoretical approach that values multiple forms of knowledge (Millard and Kingfisher 1998; Prior 2003). Studying the experiences of health care staff gives attention to those who shape how group visits happen and hold power over how medical care is delivered. Studying the perspectives of patients receiving care in safety-net settings brings attention to how they participate in, resist, and help shape the kinds of care that are offered to them. All study procedures including observation and interviewing were conducted with the approval of the UC San Francisco Internal Review Board (Study #15-18421). Informed consent was obtained from all participants.

Findings

Twenty-eight staff involved with group medical visits participated in interviews (Table 1), as did twenty-five patients (Table 2). In interviews and observations with patients and staff, I found that participating in group visits dramatically affected providers' and patients' experiences of giving and receiving care. In this section, I delineate specific practices that differentiate the process of care in group visits, allowing for participatory interactions for both patients and providers and thereby refuting some of the hierarchy typical in individual care. In the course of observations and

interviews, I found that: 1) patients participate in the work of group visits in ways that were distinct from individual care, and group visit providers expressed confidence in patients' ability to develop and act on medical knowledge; 2) providers participated in care in ways that were distinct from individual care and drew on their own multiple forms of knowledge; 3) patients participated in each other's medical care by challenging, supporting, and advocating for one another. Building on existing literature about how group visit participants can co-create an alternate form of clinical care with the potential for more equitable relationships between patient and provider (Kirsh et al. 2017; Lavoie et al. 2013; Massey et al. 2006), this article provides detailed analysis of the processes and practices that allow for patients to meaningfully participate in their own and each other's health care.

"Twelve doctors in this group": Work patients wouldn't do in standard care

In a men's health group that I observed, six men with pre-diabetes or hypertension met with their primary care doctor and a medical assistant, also men. When patients arrived, they appeared practiced and confident checking their weight and blood sugar and filling out paperwork about vital signs and medication refills. They chatted while helping each other with the blood pressure cuff, then joined the medical assistant in preparing vegetable egg muffins in the kitchen part of the group space. The doctor briefly checked in with individual patients at a desk in the room, as quiet music played.

Checking vital signs, including blood pressure, weight, and sometimes additional items such as blood sugar or pain levels, is a standard part of both individual care and most group medical visits. In group visits I observed, staff shared medical and technical knowledge with patients, and demonstrated their confidence in patients' ability to develop this knowledge and use basic medical technologies, such as those used for vital signs. In some programs, patients checked their own vital signs and helped each other when assistance was needed. As in the men's health group, patients

would note their vital signs on a form that included data such as medication refill needs, pain scales, or questions for the provider. This information was later entered into the medical record by staff.

When I asked a patient in the men's group if he had known how to check his vital signs before joining the group, he answered,

No, I didn't even know how to put on a sphygmomanometer cuff... [a staff member] showed me...I can't put it on by myself...there's always somebody there to help with the cuff...it took, you know, six months of doing it once a month to figure out how to work the blood sugar things...now I know how.

I mentioned that the patients looked comfortable checking their vital signs and he answered, "It's because of the group. I didn't know how to do any of this...this is a very cool thing." It is notable that this patient not only felt comfortable checking his vital signs with assistance from peers but had learned the technical term for a blood pressure cuff. The practice of patients checking and documenting their own vital signs is also a core part of Centering Pregnancy, a group prenatal care model that had been implemented at all four of my research sites and influences other group visit programs. At other sites where staff checked patients' vital signs, results were sometimes shared publicly on a whiteboard for all to observe. At one organization, patients who attended weekly chronic pain groups were not required to check vital signs at every session. When I asked a patient about this, she said, "Sometimes we do, sometimes we don't…we decide." At that organization, patients were asked to fill out paperwork about their pain and health goals, and a medical assistant was available to check vital signs if patients decided to. A clinician told me they did not need vital signs to bill patients' insurance (and had determined they were not clinically necessary on a weekly basis) but would check them if the patient or clinician wished to.

Many staff noted that patients more readily absorbed health-related information when it came from their peers rather than from a clinician and talked about patients' health-related interactions with each other as the most important part of what happened in group medical visits. In a group for

Spanish-speaking people with diabetes, Sushil,⁵ a clinician, told the 12 patients, "no hay un medico en este grupo, hay 12 medicos!" [there isn't just one doctor in this group, there are 12 doctors!] making the case that they could provide valuable medical care to each other. His comment mirrored the words of a support staff person that "this [group visit] is part of a culture change where the provider learns to share the care." Patients in group visits frequently challenged and supported each other in ways that providers cannot or would not do effectively, taking on a kind of work that is the provider's role in an individual visit.

In the diabetes group, Sushil asked each patient to share a recent success. One patient said he hadn't had any successes, explaining that he could not eat healthy or take medications regularly because of his job selling ice cream out of a mobile cart. Another young woman shared that she had recently started taking better care of herself despite the challenges of being a single mother of four children. Looking at her fellow patient the ice cream seller, she said firmly, "you have to take care of yourself because of love for your family!" A working parent herself, she could relate to the competing demands of self-care and caring for a family that made it hard for him to treat his diabetes, but she was confident that he could find a way to take his medications because she had done so. This patient had experiential authority that allowed her to challenge another patient without negative repercussions. Such legitimacy comes from being a peer with similar experiences and challenges, something Sushil's professional expertise and medical authority may not have provided. He did not see this woman's experiential knowledge as secondary to what he was offering, but as a legitimate, even authoritative element of other patients' care. In an interview, he explained how he viewed the patients' role in group visits, saying they should "teach each other and coach each other," work typically seen as belonging to health care staff. Like many providers I spoke with, he

⁵ All names are pseudonyms.

challenged the hierarchy of typical patient-provider interaction, arguing that medical expertise is not the only authoritative or valuable form of knowledge.

Because group visits take place within clinical spaces, they must align with certain hierarchical standards of medical organizations and insurance companies. For example, before the use of electronic health records, many group visit programs would give patients their medical charts to note vital signs and other information that would become an official part of the chart. However, patients in the clinics I observed were not permitted to access their electronic medical records; instead, they typically wrote on paper and staff later entered the information into the electronic record. Small shifts, like inviting patients to make decisions about whether and how vital signs are taken—a routine rarely questioned in medical practice—were one of the ways that patients and staff refuted hierarchical practices by changing the process of care. In some cases, patients described making decisions themselves about when to check vital signs. In other cases, patients willingly helped to provide each other's medical care by assisting each other with vital signs. As evident in these examples, staff assumed patients were capable of taking on specific elements of medical knowledge and practice, doing so accurately with staff members available to provide interpretation of results or negotiate conflicts that might arise between patients.

Serving patients water: work providers wouldn't do in standard care

Later in the men's health group, a female health educator arrived to lead a dance lesson. The patients and doctor stood in a circle, and the health educator led gentle stretches. Patients were smiling as the health educator taught them a routine to upbeat music playing on her phone. "Just move, it doesn't matter!" one patient told his confused neighbor. One man said, "next month they're gonna hire us!" and another, "we're gonna live 15 years longer!" When the lesson ended,

everyone clapped. The doctor had been dancing too and asked, "did anyone notice it was a little easier this time?" He poured water in cups and served each patient as they chatted about sports. This was one of many times that I observed providers in group visits undertaking activities that they would be unlikely to do in a standard office visit. In a typical clinic setting, there is an emphasis on clinicians doing work that only they can do, and only that work. In group visits, clinicians often participated in some of the same activities as patients and engaged in activities that would elsewhere be seen as the domain of support staff. Though clinicians were there to share their medical knowledge, they used multiple forms of knowledge and experience.

In the group described above, the doctor provided individual medical care, danced with his patients, and served them water. In many group visits, providers shared information about their own lives that they said they would not be as open about in standard care. For example, in most groups I observed, providers included themselves in group "check-ins," discussing their own health goals alongside their patients. Badra, a clinician, explained that she started a chronic pain group in part because of her own experience:

I also have chronic back pain and I found as a provider...I could be sympathetic or empathetic to what's going on.... Do I bring in my history? Not too much, but sometimes I will...if I'm assessing how their pain scale is, I'll let them know how I am doing today too.

In addition to providing medical care, Badra at times provided her own vital signs as a point of reference for her patients.

In observations and interviews, it became clear that many patients and staff saw anyone in the group space as a participant. Staff involved in group visits acknowledged that they held expert and experiential knowledge and used both in the group setting. Clarissa, a group facilitator, said, "Everybody in the group is a participant...The [medical] residents who come in participate...

Nobody is just sitting there watching and listening." My own attendance at group visits was ostensibly to introduce my research, observe and collect data. However, I often was also invited to

participate in group activities, whether "checking in" at the beginning of group, sharing food patients had cooked, or doing yoga. Patients in some groups described support staff (such as medical assistants or health educators) as "group members." These support staff were more often people of color than clinicians, as were the majority of patients. One patient said about a support staff member:

He's also one of us, because...he has the same issues that we do. [He asks] "How do I keep the weight off, having trouble getting to the gym, you know, what kind of food do I eat?"...Having him just be one of us, it makes a big difference.... He's part of the group.

A patient named David extended this insight, explaining that in group, "You feel like you're a community and not just a patient and a doctor...It's essential to our health to have that ability to come and be social...and get to know each other." David was not alone in making the case that such collective experiences of health improve his health and that of the other patients, in ways that are drastically different from many individual health care encounters. Patients described group visits as reducing the power differential between medical staff and patients but did not describe friendships with providers, which Kirsh and colleagues (Kirsh et al. 2017) report as one result of more equitable patient-provider relationships in group visits.

Many providers spoke extensively about the benefits of minimizing their 'expert' voice or presence in group, while seeing themselves as holding particular kinds of knowledge that were different from patients' knowledge. 'Stepping back' and 'getting out of the picture' were terms used to describe a facilitation technique that some clinicians emphasized as a key part of their role and experience in group visits. This technique was exemplified in different ways. One clinician said, ". . . if I can get myself out of the picture I think that's really important just because of what I represent as a provider," later indicating that as a provider her presence could be intimidating to patients. Other clinicians mentioned reducing how much they speak. One said in an interview, "My goal is to

talk as little as possible" and another explained, "... It's really good practice for me to keep my mouth shut!...just to listen to people and not jump in." For these clinicians, stepping back is about speaking less, leaving space for patients to participate and take part in shaping discussion. Clinicians who reported that they practiced stepping back sought to remain attentive and provide input when patients requested it or when they perceived their specialized knowledge was needed, but also saw patients as having different kinds of knowledge that are a valuable part of the care provided. A clinician named Diane described how she intervened if patients are sharing information she saw as medically incorrect:

If it comes to a standstill, people are just scratching their heads, or people are just saying things that really are not correct, like, 'yeah you can drink all the juice you want, it's really good for you when you're pregnant!' then I do step in, and I go 'well, actually. . .' but it's in that kind of mode of almost, not peer exactly, but kind of a sharing.

She affirmed that providing clinical information is an important piece of the provider's role in group visits, just as in individual care, even as she described herself as playing a more peer-like role than in individual practice.

Practicing this way required a kind of re-training. When asked where they learned to step back while providing care in group visits, clinicians mentioned observing peers who practiced in groups visits or attending trainings with the Centering Healthcare Institute, one of few organizations that provide formal training in group visits. Diane was perhaps most explicit in explaining how formal training in group facilitation shaped the way she practiced, saying the Centering Institute trainers "kinda gave me permission" to "just shut your mouth and let [the patients] talk." Multiple clinicians described group visits as being the only place where they could practice the kind of medicine they found most helpful: an approach in which patients had time to share their experiences and there was adequate space for patients and providers to develop therapeutic relationships.

"Call you in the morning, call you at night:" peer relationships as medical care

The primary difference between group medical visits and standard care is that there are multiple patients present. Group visits include interaction between patients, and their interactions are often part of each other's medical care. I argue that patients in many group visits actively participate in each other's care by challenging and supporting each other with adhering to self-care practices and advocating for each other in interactions with clinicians.

Dannie'lle, a patient in a group visit for chronic pain, lived with pain from a congenital disease, as well as mental health issues she described as "manic depressive schizophrenic bipolar." When we met, she had participated in the group co-facilitated by a clinician and a mental health provider for over a year. A regular participant in their weekly sessions, Dannie'lle told me about plans to sell a book of poetry she had written and use the proceeds to buy a laptop that group members could share for things like job applications. She described how months earlier, she had unintentionally begun speaking in the group about a current mental health crisis:

I'd found some friends [in group] and then I kinda started opening up. When I had the--I call it my break when I was really mad at my mom, I wanted to kill her and everything...I had to apologise to group because I was like, I don't want you guys to see this side of me.... It surprised me that most of them actually understood and they had similar maybe child trauma or abuse...that happened in their past with their parents.... They were texting me their most inner secretive things you wouldn't share with people...It got them to open up about things really bad that happened to them.

I asked Dannie'lle whether other patients shared their traumatic experiences with the whole group, and she clarified, "They didn't actually come to group and tell but they shared it with me," allowing

her to give as well as receive support. When I asked if the experience changed her ideas about what she might share with the group in the future, she answered:

...That was something initially I wouldn't have shared but after I did, the response that I got--in that it helped other people--made me think maybe I could open up more about my mental problems and anger issues with the group, because they were more understanding then I thought they would have been...I thought [group] was just for the physical pains that you are having because that's what pain and wellness--But [the staff said],"No, the wellness is to make you well, to help heal you in whatever way.".... It helped [the other patients] when I was going through it and venting it. I didn't think it was actually to help them, but it was helping me to let it go. [But] in hindsight, it did help them. In the future if I was having another break, yes, I would probably share it again because it might reach someone who I didn't reach the first time.

Dannie'lle's story shows how group visit staff created conditions that connected pain treatment, wellness, and the work of healing. Providers acknowledged that peer support alongside expert intervention could produce all of these and encouraged patients to support each other as part of accessing care. This case exemplifies how patients participated in their own and each other's care in group visits, in this case disclosing traumatic experiences and receiving emotional support from peers instead of or alongside medical providers. Garcia (2010) writes about peer relationships among people struggling with addiction, "Within the clinic the idea that the other's suffering is our own is not abstract; it is visceral. How might those in the throes of pain help to heal each other? How might the suffering of others and the painful forms of recognition it evokes be a force for care and not a crippling force?" (67-8). In presenting her vulnerability, Dannie'lle did not feel stigmatized, and indeed her experience in the group resulted in seeing herself as a force for care for others with chronic pain and trauma. She did not initially intend to share the details of her mental health crisis but was glad she did. Her unplanned disclosures resulted in a referral to ongoing mental health care, closer connections to peers, and mutual support. Garcia (2010) shows how in the context of drastically inadequate access to medical care for addiction, peers and family members provided tremendous support with limited positive results. In contrast, Dannie'lle developed relationships of

care with peers because she had access to frequent health care with peers present. In turn, she accessed additional mental health care because she shared her story with her peers. Where Garcia observed people who were a force for care in the absence of needed health care, Dannie'lle acted as a force for care alongside health care staff, within an innovative and accessible clinical setting where she simultaneously experienced medical and mental health care and mutual peer support.

Many staff noted that patients more readily absorbed new information when it came from their peers rather than from a clinician and talked about patients' health-related interactions with each other as the most important part of the group visit. Marie, the facilitator of a group for patients with mental illness, described how group members supported one woman who struggled to give herself the daily insulin injections she needed. Marie explained the strategies that the group developed to support her:

[She] goes through these periods where she just will not take her [insulin]...she's got this kind of like, 'I don't know, it's just hard to remember. I just didn't take it.' We've tried everything. Can you line it up with your favorite TV show? Can you set an alarm on your phone? And the group members are like, "Okay I'm going to call you. I'm going to call you in the morning, I'm going to call you at night." They're like that. They're not in denial about each other's medical issues... they feel empowered in the group, like 'this is our group...' She needs that call every morning and night to take her meds, but it needs to be from another patient. It can't be from me.

Marie noted that, after the reminder phone calls from the group members and her subsequent more consistent use of insulin, this woman's blood sugar levels went from being dangerously high to stabilizing within the range considered "good control." Other patients supported her through frequent contact and accountability that began within a clinical space and continued outside of it. The patients' willingness to call their peer twice a day exceeded the parameters of Marie's job, and she was confident this care was more effective coming from patients. Like Dannie'lle in the story above, these patients became a force for care; they and Marie challenged the hierarchy of typical patient-provider interaction. She argued that medical expertise is not the only authoritative or

valuable form of knowledge that can improve patients' health, and that patients' expertise has value for their peers.

In some group visits, I observed patients advocate for each other with clinicians. In a chronic pain group, a clinician named Izumi provided brief medical consultations in a circle, making referrals and refilling medication with patients listening to each other's visits. A patient named Berla asked if she could see a podiatrist, and Izumi questioned why she needed the podiatry visit. Berla seemed confused and another patient offered to clarify, explaining to Berla that "Izumi needs to refer you, and wants to know what the referral would be for!" Berla explained she wanted a podiatrist to check her orthotics; after 19 years wearing the same ones, she felt they were worsening her chronic pain. Izumi quickly agreed to the referral and they moved on. Here, patient and provider were operating within the confines of a healthcare landscape where insurance would not pay for a specialist visit without a referral from a primary care provider. The patient and clinician seemed confused, and another patient briefly intervened to make sure they understood each other. This advocacy allowed the visit to move forward without conflict, and the patient's medical need was met. In an individual visit this interaction might have become adversarial, or the patient might have dropped the question rather than risk a tense interaction. Instead a misunderstanding was quickly resolved, allowing the clinician to make the appropriate referral, the patient to see the podiatrist, and the group to move on to another person's care, all aided by the momentary intervention of another patient.

These examples and others demonstrate how low-income patients can participate meaningfully in each other's medical care, even within the constraints of clinical settings. The presence of peers makes space for patients to informally share knowledge of how to navigate the healthcare system, and to model successful communication with clinicians in ways that allow others see how to get what they need. These interactions took place in sessions where patients with chronic

conditions received medical care, shared snacks, asked and answered each other's health questions, and participated in meditation, acupuncture or other complementary health approaches. While they depended on their health care providers' professional expertise, they benefitted also from their peers' willingness to challenge, support and advocate for each other. As a patient named Ruth succinctly described the women in her group visit: "We're encouraging each other.... Let me see if you can do it, and we do it together, and we watch each other.... We amplify each other, we lift each other up."

Discussion and Conclusion

This article adds to the substantive literature on group medical visits as an innovation in health care delivery. Such research has focused primarily on health outcomes (see for example (Edelman et al. 2012; Homer et al. 2012). In contrast, I have delineated some of the key practices that allow for participatory care in group medical visits at four community health centers in the U.S., improving patient and provider satisfaction with care and representing a potential challenge to the hierarchy of typical patient-provider interaction. I find that the presence of multiple patients is a distinct element of the process of care which affects how both patients and providers act in the medical interaction, and thus changes relationships between them. In addition, I argue that patients participate in their own and each other's medical care while giving and receiving peer support.

The current standard for individual medical care includes extremely abbreviated visits that may be unavoidably rushed and transactional and exacerbate health care inequalities (Fiscella and Epstein 2008; Sweet 2012). In group visits, patients share the provider's time and attention for an hour or more. In addition, they have opportunities to offer and receive care, support, and advocacy alongside their peers (Lavoie et al. 2013). Previous research on group visits has included community

health centers and other settings serving low-income or otherwise marginalized patients, and has also shown the benefits of group visits for patients in other settings including private practices and specialty care such as cancer survivorship programs and bariatric surgery follow-up (Kaidar-Person et al. 2006; Noffsinger 2012; Reed, Partridge, and Nekhlyudov 2015). Staff and patients in my research all agreed that some patients would never choose to receive care in group visits, either because of discomfort with sharing their medical history or discomfort in group settings for other reasons. However, it is clear that group visits are not a form of second-class care for patients with limited health care access but have unique benefits that appeal to patients with a wide variety of health concerns and life circumstances.

It is notable that when asked about challenges and limitations of group visits, the patients and staff members I interviewed had overwhelmingly positive feedback about the programs, and this is both a strength and a limitation of this study. All agreed that group visits should not be mandatory in any setting, and some patients and staff thought that particular personal characteristics made clinicians more suitable for group visits. There were varied perspectives on how much group visits could or should replace individual primary care, and whether it was better for patients to participate in intensive short-term group visit cohorts or long-term programs with flexible drop-in membership. Future research could include the perspectives of patients and staff who had participated in group visit programs and then stopped participating and should explore the strengths and weaknesses of programs with different durations of participation; this would likely provide more insight into the limitations of such programs.

Another limitation of this study is that over 60% of the patients in the interview sample had at least some college education, which is not typical for a safety-net clinical setting. Only 25% of patient interviewees had completed an associate's degree or higher, however, and the mean age of the sample was 58, indicating that interviewees would may be unlikely to complete a degree program

if they have not already. It is possible that interviewees had higher levels of health literacy and health-related knowledge than other participants in group visits. It also seems likely that more educated patients self-selected for participation in this university-sponsored research study. Though this sample appeared to represent a cross-section of group visit patients at these clinics in terms of health and socioeconomic status, future research should include targeted sampling to learn about the experiences of patients with lower levels of education who participate in group visit programs. Such sampling could provide more insight into the benefits of group visits for improving health literacy and technical/medical knowledge.

Care in group visits is provided in ways that align with insurance company requirements and clinical guidelines used in standard care. The programs I describe provide integrative health care, combining medical care with complementary health approaches such as acupuncture, yoga, or mindfulness. Yet the patients and staff in these programs also take part in the rushed, high-volume individual care that is standard in community health centers and other settings. A critique of group medical visits might suggest that they are a way of teaching patients to be more successfully socialized into medicine through increased self-surveillance (Armstrong 1995). Because these programs operate within a hierarchical system, patients' knowledge claims are subject to constraints. In group visits, as in the rest of health care, clinicians are the dominant group, holding control over resources and treatment approaches that affect patients' lives. My analysis partially refutes this critique by demonstrating how multiple forms of knowledge can be made visible and actively challenged and legitimated in a clinical setting. These findings suggest that patients' embodied and experiential knowledge is synthesised with medical knowledge, and that while group visits do not entirely evade medical hierarchy, they may create spaces for patients to dissent or resist clinicians' authority or treatment recommendations.

Building on the literature of multiple knowledges and lay/expert knowledge divides, I detailed settings in which both patients (typically seen as laypeople) and providers (typically seen as experts) are assumed to have syntheses of multiple kinds of knowledge, including medical and experiential knowledge, and take on new activities and responsibilities (Potter et al. 2016). The presence of multiple patients in the same clinical encounter means patients, through their very participation, shape the group and the role it plays in their lives and in clinicians' practice. Where in individual visits the roles of patients and providers are taken for granted, group visits demonstrate that these roles can be flexible: patients can take vital signs and follow up with each other about medication adherence; providers can share about their own lives and act as facilitators or coaches, not purely experts (Gray et al. 2016; Massey et al. 2006). This is possible when clinicians have enough time to both provide needed care and act outside of their typical clinical role. This allows them to make space for and actively value patient knowledge as relevant to clinical care; they give up the assumption that their medical and technical knowledge is the only authoritative knowledge and see patients' knowledge as beneficial to their peers. Such shifts demand critical reflection about to what extent hierarchy is necessary in medical care, and what kinds of knowledge are important to improve health. In group visits, staff and patients benefit not only from the knowledge of the health care provider(s) present, but from the syntheses of knowledge brought by all group attendees. Many clinicians in this viewed the knowledge that patients bring as not only valuable and even authoritative, but as constituting a form of care in itself. Patients, in turn, viewed clinicians as holding specialised knowledge that they need and benefit from, but also holding relevant experiential knowledge; in addition, some saw their peers as what Garcia (2010: 68) calls a "force for care." Patients and clinicians saw this care setting and the practices that are part of it—whether clinicians sharing information about their lives or patients checking their own vital signs—as leading to mutually respectful relationships and improved health. These changes in how patients and clinicians

view each other serve as a means of questioning power hierarchies by undoing the strong separation between these two groups.

It is important to note that the programs included in this research primarily serve communities of people who have been deeply affected by lack of access to medical care and by discriminatory care. Patients and staff spoke of the effects of past and ongoing trauma on the health of group members and local communities and believed group visits could play an important role in addressing physical suffering and social isolation by providing healing relationships with clinicians and peers. Several staff described group visits as "mending" patients' negative relationships with health care staff, not by erasing past experiences, but by demonstrating more horizontal and mutually respectful relationships within the group and supporting patients' ability to advocate for themselves with clinicians outside of the group. Patients and staff spoke to the power of peer support to improve patients' physical and mental health. Past research has shown that health care encounters reproduce inequality for marginalised patients (Dubbin et al. 2013; Waitzkin 1993); group medical visits suggest that this need not be the case if the structure of the health care encounter is changed. Group visits expand on access to care and create an ethic of ownership in which patients can become part of a community while receiving medical care. In the current political moment, group medical visits offer one approach with potential to reduce the vulnerability of those targeted by particular health and political policies. Providing peer support and community integration in a clinical setting can, formally or informally, provide a critical sanctuary.

Table 1: Demographics of Group Visit Staff Sample (N=28)

Characteristic	n (%)
Age, mean years (SD)	43 (SD 12)
Gender, n (%)	
Male	6 (22)
Female	22 (78)
Race/ethnicity, n (%)	
Asian	3 (11)
Black/African American/African	2 (7)
Hispanic/Latina/o	4 (14)
White/Caucasian	15 (54)
Multiracial or other	4 (14)
Primary role, n (%)	
MD	13 (46)
Manager or program coordinator	4 (14)
Health educator/group visit coordinator	4 (14)
Other licensed clinicians (nurse-practitioners, psychologists)	2 (7)
Other support staff (medical assistant, substance abuse counselor, promotora, AmeriCorps member)	5 (18)
Years of experience in Group Visits, n (%)	
<1 year	2 (7)
1-5 Years	14 (50)
6-10 years	6 (21)
>10 years	6 (21)
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Table 2: Demographics of Group Visit Patient Sample (N=25)

Characteristic	n (%)
Age, mean years (SD)	58 (12)
Gender, n (%)	
Male	7 (28)
Female	18 (72)
Race/ethnicity, n (%)	
Black/African American	15 (60)
Hispanic/Latina/o	3 (12)
White/Caucasian	5 (20)
Other	2 (8)
Education, n (%)	
Less than high school	2 (8)
High school	7 (28)
Some college	9 (36)
Associate's or bachelor's degree	5 (25)
Self-reported chronic conditions, n (%)	
Diabetes	7 (28)
Chronic pain	18 (72)
Mental health condition (most common depression, PTSD)	10 (40)
Hypertension	7 (28)
3 or more chronic conditions (including conditions listed above)	12 (40)
Length of Participation in Group Visits, n (%)	
< 6 months	13 (52)
1-2 years	8 (32)
>2 years	4 (16)

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The author declares that there is no conflict of interest.

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Chapter 4: A Crack in the Wall: Chronic Pain Care in

Integrative Group Medical Visits

Abstract:

Amidst a national crisis of opioid overdose, there is substantial uncertainty about how to safely and effectively address chronic pain. This article focuses on integrative group medical visits (IGMVs), one model of increasing access to non-pharmacological chronic pain treatment. I argue that multiple uncertainties surrounding chronic pain and its treatment create space for safety-net providers and clinics to provide care in IGMVs. Amidst uncertainty and their patients' limited access to integrative health care, safety-net providers offer IGMVs in response to local conditions of possibility: existing group visit programs; large populations of patients with chronic pain, and clinicians with interest and experience in integrative health care. Most IGMV patients did not specifically seek out integrative care, but once in IGMVs, patients and providers innovated together, shaping the structure of the group and their roles within it. Many patients and providers described IGMVs as better than individual care for chronic pain and saw benefits to both patient health and provider job satisfaction. I close by examining how organizational and structural conditions, including lack of reimbursement for complementary health approaches, make this kind of care possible while simultaneously limiting its growth.

At a health clinic in an urban strip mall, there are two doors. One door enters into standard individual care: a waiting room with rows of chair and a reception desk. The other door enters a group visit and wellness center. Here, patients are greeted by a staff member, then go directly into the large group visit space. On the walls there are photo collages of trips patients and staff have taken together to vistnearby beaches and forests. Exercise equipment is organized neatly against a wall: weights, thick black exercise mats, yoga mats, and an old stationary bike. A small table holds tea, sugar, stevia, Styrofoam cups and speakers for music. The space is busy with group visits all day, from an 8am rigorous aerobics group to a family exercise group that ends at 7:30pm. Each hour, patients check their vital signs with help from a medical assistant, then sit in a circle for a group check-in and discussion. They participate in some kind of group treatment: acupuncture, patients laying on massage tables in a darkened room; yoga, led by a physician; a women's group that begins and ends with meditation. When needed, a doctor takes individual patients into an adjoining exam room for a quick visit to refill medications or talk about acute issues. Many groups end with the patients chatting, hugging each other and the staff, and greeting others who are entering for the next group. —composite field notes

Introduction

In an environment of uncertainty about what constitutes good care for chronic pain, safetynet clinics are using multiple, heterogeneous approaches to improving pain care. This article focuses
on group medical visits that provide integrative health care, one model of increasing access to nonpharmacological treatment approaches. Amidst a national crisis of opioid pain medication overdose
(Seth et al. 2018), now deemed a public health emergency, there is a great deal of clinical uncertainty
about how to treat chronic pain. Major medical associations and government agencies have called
for interdisciplinary care (Jeffery et al. 2011) and non-pharmacological treatment; for example, the
Mayo Clinic recently published an article reviewing the evidence for using specific complementary
health approaches to treat chronic pain in certain parts of the body (Nahin 2016). Though primary
care providers nationally are under pressure to reduce or discontinue their patients' use of opioid
pain medications (Hurstak et al. 2017; Knight et al. 2017), patients in the health care safety-net
typically have limited access to non-pharmacological treatment. I examine how health care providers

construct integrative group medical visits (IGMVs) as a tool for addressing uncertainty and how they innovate together with their patients, with attention to the conditions that make IGMVs possible or limit their growth.

I argue that uncertainties amid crisis create space for safety-net providers and clinics to provide care in IGMVs. These uncertainties include 1) the opioid crisis and uncertainty about how to safely and effectively treat chronic pain; 2) uncertainty related to the etiology of chronic pain, a condition that lacks biomarkers or other 'objective' means of diagnosis or treatment; and 3) uncertainty about the value, safety and efficacy of complementary health approaches such as massage and acupuncture. In a national context where prescribing and using opioids is seen as increasingly risky, integrative health care has become a comparatively safe experiment —not necessarily to replace opioids, but as one of many efforts towards opioid reduction.

Complementary health approaches such as acupuncture and yoga are widely used as part of chronic disease treatment and self-management (Abrams et al. 2013; Nahin et al. 2016). Integrative health care combines biomedical care with complementary health approaches (Horrigan et al. 2012). However, access to integrative health care is stratified; such services are rarely reimbursed by insurance, and high out-of-pocket costs makes them largely inaccessible to people who are uninsured or publicly insured. Safety-net patients and clinicians continue navigating the tensions between ongoing undertreatment of African-American and Latina/o people's pain (Meghani, Byun, and Gallagher 2012) and recent, extremely high rates of opioid prescribing, particularly among White people (Knight et al. 2017; Wailoo 2015). These challenges are particularly complex given that safety-net patients with chronic pain have high rates of chronic conditions as well as individual and community trauma that may cause or exacerbate chronic pain (Nicol et al. 2016; Pinderhughes, Davis, and Williams 2016).

Group medical visits (GMVs), also known as shared medical appointments (Noffsinger 2012), are now widespread in U.S. primary care. Commonly used for prenatal care (Byerley and Haas 2017) and diabetes (Burke and O'Grady 2012), GMVs bring multiple patients to the same space for medical care, health education, and peer support. GMVs have been implemented to treat chronic pain and opioid use disorder, with goals of encouraging safer use of opioid medication (Romanelli et al. 2017) and increasing access to medication-assisted treatment such as buprenorphine (Sokol et al. 2017), and supporting self-management of chronic conditions (Gaynor et al. 2007). In the past decade, some Federally Qualified Health Centers have begun offering integrative group medical visits (IGMVs) that include complementary health approaches. IGMVs are a financially feasible model because biomedical providers typically bill patients' insurance as they would for a standard appointment. For chronic pain, they provide access to non-pharmacological treatment for low-income people, who typically are less likely to use complementary health approaches (Clarke et al. 2015).

This article is about innovation in settings with limited resources. Below, I describe multiple forms of uncertainty related to opioid pain treatment, the use of complementary health approaches, and stratified access to chronic pain treatment. I find that in the context of uncertainty and limited access to integrative health care, safety-net providers make decisions about what kinds of integrative health care to offer by responding to local conditions of possibility: existing group visit programs; large populations of patients with chronic pain; and clinicians with interest and experience in integrative health care. The specific complementary health approaches and treatment durations in IGMVs are not necessarily grounded in the ever-changing evidence base for non-pharmacological chronic pain treatment. Rather, they are the approaches that providers and organizations find most feasible (Hurstak and Kushel 2016). For their part, patients generally have not sought out a clinic that offers acupuncture or mindfulness, but rather enrolled in IGMVs in response to a primary care

provider's recommendation or a flier found in a clinic waiting room. Once in IGMVs, patients and providers innovate together, shaping the structure of the group and their roles within it. Many patients and providers describe IGMVs as better than individual care for chronic pain and see benefits to both patient health and provider job satisfaction. I close by exploring how organizational and structural conditions, including lack of reimbursement for complementary health approaches, both make this kind of care possible and limit its growth.

Background and theoretical framing

Crisis of pain and addiction, uncertainty of opioids

Chronic pain is inherently uncertain (Pryma 2017; Rouse 2009). Though some chronic pain has a clear cause, such as rheumatoid arthritis or sickle cell anemia, in many cases there is uncertainty about the etiology of pain as well as its progression and potential for resolution. There is increasing public attention to opioid medications both as prescribed treatment for chronic pain and as part of an iatrogenic crisis of opioid overdose death. In 2016, over 64,000 people in the US died from drug overdose, and the majority of these were caused by opioids, legally or illegally procured (National Institute on Drug Abuse 2017). Multiple accounts (Baszanger 1998; Wailoo 2015) trace the history of chronic pain as a national crisis throughout the 20th century. Opioid prescribing rose rapidly in the 1990s in response to growing concern about undertreatment of pain. This was followed by "A 'pendulum swing' toward increased scrutiny about the safety and the efficacy of chronic opioid therapy" and then "increased opioid prescription surveillance" that continues today (Knight et al. 2017: 88). Research has demonstrated that even when pain was being overtreated at the population level among white people, African-American people's pain was often undertreated (Hampton, Cavalier, and Langford 2015; Meghani et al. 2012).

Primary care clinics like those in this study have been the leading site of opioid prescribing (Chen et al. 2016; Daubresse et al. 2013). Patient-provider relationships in chronic pain care are often contentious, and providers struggle with assessing and treating chronic pain (Esquibel and Borkan 2014), particularly among patients with substance use (Chang et al. 2016) or mental health conditions. The CDC and others have called for multidisciplinary pain treatment that draws on the biopsychosocial model (Engel 1981; Fava and Sonino 2017), in some cases including complementary health approaches (Dowell, Haegerich, and Chou 2016; Joint Commission 2017). However, such "gold standard" chronic pain treatment is not widely available, particularly in the safety-net (Hurstak and Kushel 2016). Even as providers contend with organizational and national policies urging them to restrict opioid prescribing (Hurstak et al. 2017), they have very limited options for non-pharmacological treatment that will not cause other forms of harm (Hurstak and Kushel 2016; Knight et al. 2017). Treatment guidelines such as those published by the CDC (Dowell et al. 2016) have not been written with attention to the medical complexity and structural vulnerability that are ubiquitous in the safety-net, where much chronic pain care is provided. However, the opioid crisis is driving a variety of changes to chronic pain care, including the implementation of IGMVs.

Complementary health approaches, relative safety and efficacy

Recent national data finds that about one-third of US adults use complementary health approaches. Use is substantially lower among Hispanic (22%) and non-Hispanic black (19%) adults, people with less than a high school education (15%), and people who are publicly insured (25%) or uninsured (23%) (Clarke et al. 2015). In other contexts, complementary health approaches have been the preferred or only available treatments in many marginalized communities. There is continued contention about how complementary health approaches might best be integrated into biomedical care, and how to make them accessible to a broad population (Chao and Adler 2018;

Gale 2014). In recent years there have been growing efforts to codify an evidence base for complementary health approaches through efforts such as Cochrane reviews of acupuncture and massage for particular health conditions (Furlan et al. 2015; Paley et al. 2015), although the trend towards using biomedical research to study complementary health approaches has been critiqued by social scientists and others (Adams 2002; Keshet 2009). The use of biomedical research approaches to assess the efficacy of complementary health approaches is gradually increasing biomedicine's acceptance of some treatment modalities, but there are continued challenges to the legitimacy of complementary health approaches (McDermott, Kang, and Stobbe, 2018).

Many providers and patients are willing to try complementary health approaches in part because they are generally safer than opioids, now seen by some as extremely risky (McDermott, et al. 2018). Hurstak and Kushel (2016) found high levels of interest in integrative care in safety-net settings, but lack of reimbursement for complementary health approaches was a major barrier. Licensing and insurance reimbursement of non-biomedical providers has generally been taken up by policymakers at the state level rather than the federal level. For example, Medicaid programs in four states are offering pilot programs covering acupuncture, massage, and other treatments for chronic pain (Donovan et al. 2017; Weeks 2017). It is unclear whether such efforts will spread enough to substantially improve access to integrative care.

Some small studies provide promising evidence for IGMVs, and most of these have focused on chronic pain. Quantitative research indicates significant reductions in pain levels, opioid medication use, and depression (Dresner et al. 2016; Gardiner et al. 2016; Mehl-Madrona, Mainguy, and Plummer 2016); improvements in health-related quality of life, depressive symptoms, and sexual health outcomes in women with chronic pelvic pain (Chao et al. 2015); and reductions in depression, loneliness, and fatigue among Latina/o adults (Cornelio-Flores et al. 2017; Geller, Orkaby, and Cleghorn 2011b). Studies suggests that stress reduction via increased patient empowerment in

IGMVs may contribute to improved health outcomes (Chao 2012; Geller and Crowley 2009).

Qualitative findings on IGMVs emphasize the benefits of peer support and shared experience
(Chao et al. 2015; Cornelio-Flores et al. 2017; Dresner et al. 2016). Patients also described learning
to advocate for themselves (Chao et al. 2015), changing health-related behaviors, and preferring
group chronic pain care over individual visits (Cornelio-Flores et al. 2017; Dresner et al. 2016). All
research to date on chronic pain IGMVs has been conducted in safety-net settings, including some
of those whose work is examined in this study.

Stratified distribution of pain, stratified access to treatment

Though generally conceptualized as physical, pain is also known to have psychological and emotional components. Chronic pain and depression are now widely understood to be not only correlated but likely bidirectional (Cheatle 2011; Sachs-Ericsson, Kendall-Tackett, and Hernandez 2007; Sullivan et al. 2010). Both pain and depression also appear to be closely tied to experiences of chronic stress and trauma (Dasgupta, Beletsky, and Ciccarone 2017; Doran et al. 2014; Nicol et al. 2016). Racial/ethnic and socioeconomic disparities in chronic pain treatment incidence mirrors disparities in other health conditions (Hollingshead et al. 2016; Janevic et al. 2017; Meghani et al. 2012). Race, socioeconomic status, gender and language (Hollingshead et al. 2016; Pryma 2017) heavily shape experiences of chronic pain diagnosis and treatment. Chronic pain is more common among people with multiple chronic health conditions (Robinson et al. 2017), and people with histories of childhood abuse (Sachs-Ericsson et al. 2007).

The patients in this study are in structurally vulnerable positions: low-income adults, many of them people of color and immigrants living with multiple chronic conditions and experiences of trauma. Structural vulnerability, the manifestation of structural violence in the social positions of individuals and communities, helps explain how social position can lead to poor health (Quesada,

Hart, and Bourgois 2011). A chronic crisis, structural vulnerability heightens the uncertainties of living with and seeking treatment for chronic pain. Patients experience precarious access to physical and mental health care in a context where opioid medications have been deemed risky. IGMVs in the safety-net have arisen with the intention of improving pain care for structurally vulnerable people, with particular concern about how structural vulnerability can result in social isolation and loneliness (Klinenberg 2016).

IGMVs as the right tool for the job

Integrative group medical visits are an emerging intervention whose growth has been made possible by the opioid crisis and related uncertainties. As detailed above, high rates of chronic pain, an iatrogenic crisis of unsafe opioid medications, and uncertainty about the efficacy of complementary health approaches intersect to open questions about chronic pain treatment. This crisis creates space for possible responses that have not been politically feasible, not only in health care but also in criminal justice and social services. Safety-net clinicians with experience in integrative health care are promoting IGMVs as a feasible model for treating chronic pain without causing additional harm. They determine that IGMVs are the right tool for the job (Clarke and Fujimora 1992), when the job is treating pain in settings with limited options for non-pharmacological treatment. Clarke and Fujimora's concept of the "right tools for the job" emphasizes that the tools, the job, and the 'rightness' of those tools are co-constructed to make sense in a particular situation, once a "doable problem" has been constructed (1992:7). These uncertainties create conditions of possibility and limitation that lead to providers and patients innovating together, making do with available resources to implement IGMVs.

Methods

This article is part of a larger, mixed-methods study of IGMVs in US safety-net clinics. Data was collected at four safety-net health care organizations in the San Francisco and Boston areas between March and August 2016. These organizations were chosen for their robust integrative health care and GMV programs; all have offered GMVs for at least 10 years. None of the organizations has a specific focus on integrative health care, but all four provided IGMVs that treated chronic pain. From 2009-2015, I developed and facilitated GMV programs at one of these organizations but was no longer employed there at the time of data collection.

This grounded theory project used qualitative data including observations of IGMVs, as well as qualitative interviews of patients and staff. Interviews and observation were conducted in English and Spanish. In conversation with clinicians who directed or coordinated group visit programs at each organization, I identified IGMV staff as potential participants. All IGMV staff were invited via email or in person to participate in the study via one semi-structured interview and/or being observed providing care in an IGMV. The content and scope of staff interviews was iteratively adjusted to explore themes that emerged in participant observation and patient interviews. Twenty-eight staff interviews were completed by phone or in person with physicians, health educators, and other staff. Of these, 23 were involved with IGMVs that focused partially or entirely on chronic pain. Participants provided written consent and received a \$25 gift card.

I conducted participant observation of 20 different integrative group medical visits at eight clinic sites across four organizations. Observations served in part to recruit patient participants in this study. My detailed field notes focused on interactions among patients and between patients and providers; in addition, I was sometimes invited to participate in group activities such as yoga. Eight out of 20 groups focused on chronic pain; the remainder were organized by treatment modality (e.g.

acupuncture), or by population or health condition, such as men's health and opioid addiction. Programs varied widely in duration, frequency of meetings, and stability of membership; some accepted new patients at each session, others served the same patients over time. Since they included medical care reimbursed by insurance, all IGMVs included a licensed clinician, typically a physician or nurse-practitioner. Nearly all IGMVs were co-facilitated by another staff member; one organization used a psychologist, several had health educators or "group coordinators," and some also included a medical assistant. Complementary health approaches were provided in a variety of different ways: in some cases, physicians were trained in acupuncture or yoga; others had co-facilitators trained in meditation or massage; still others had intermittent visits from acupuncturists or other practitioners. These varied staffing configurations seemed to depend primarily on the training of existing staff members, who typically played multiple roles and, in many cases, provided complementary health approaches in group visits but not in individual care. I use the term "clinician" to refer to licensed providers, and "staff" to refer broadly to all health care workers more broadly. All patients and staff provided verbal consent at the time of observation; observations were recorded in detailed field notes.

While observing IGMVs, I generally invited all patients to participate in individual interviews. Eligibility criteria included age 18 or older, verbal fluency in English or Spanish, and willingness to participate in one semi-structured interview about their experience with IGMVs. I interviewed 25 patients by phone or in person; 18 of them reported chronic pain and participated in a variety of different kinds of IGMVs. Demographic data was collected through a brief questionnaire. Participants provided written consent and received a \$25 gift card.

Qualitative data was analyzed using grounded theory methods, including iterative adjustments to data collection and analysis processes, and coding and ongoing memoing about data (Charmaz 2006; Clarke 2005). Interviews were audio-recorded and transcribed verbatim in English

or Spanish. Field notes and interview transcripts were coded using the qualitative data management software Dedoose. I developed a list of codes and sub-codes in Dedoose, adjusting the list as additional materials were coded, then refining the list through ongoing memo writing and discussion with colleagues. Chronic pain and the use of opioid medications were emergent themes in a project that was not designed to focus on a particular health condition. All study procedures were conducted with the approval of the UC San Francisco Internal Review Board (Study #15-18421).

Findings

Chronic pain care for structurally vulnerable people is permeated by uncertainties connected with chronic pain, opioid safety and effectiveness, and access to complementary health approaches. Rather than preventing action, these conditions yield new kinds of health care services, in which providers and patients innovate as part of offering and receiving care. They create spaces that embody integrative care by addressing multiple elements of physical and mental health. This is particularly important given the challenges of chronic pain care, which is often filled with tension about opioids and limited access to non-pharmacological treatment. My findings describe 1) the organizational conditions that make integrative group medical visits the right tool for a "doable problem;" 2) how providers and patients innovate together in IGMVs; and 3) constraints on the adoption and expansion of IGMVs.

Conditions of Possibility

I found three conditions at all sites that appeared to make IGMVs for chronic pain possible:

1) existing group medical visit programs; 2) large populations of patients with chronic pain, and 3) clinicians who had experience with integrative health care. Uncertainty about how to treat chronic

pain, limited access to complementary health approaches, and a large population of patients living with chronic pain resulted in patients' and providers' openness to both GMVs and integrative health care. Patients were unlikely to access complementary health approaches outside of a biomedical setting, and IGMVs made access possible. A staff member named Jossalyn¹ spoke about the benefits of complementary health approaches including yoga for her patients, most of whom were low-income African-American people:

When you think about yoga class you don't think about it being in an urban community...But if you really think about yoga, it's an ancient practice that [people of color are doing] all over the world...my patients pull up with their yoga mats and their little back packs and coming in and like "I'm going to yoga." It's awesome...you look in our acupuncture group and that is all you see, is people of color.

Jossalyn contextualized IGMVs in a global context, naming acupuncture and yoga as coming from communities of color. My research specifically focused on people deemed less likely to use complementary health approaches, and found that many, like Jossalyn's patients, were interested when given access.

Group medical visits require some level of organizational flexibility to allow for care where one health care provider spends one to three hours with a group of patients together (Kirsh et al. 2017). These organizations have invested in GMVs as an intervention that addresses some constraints of safety-net care. Such investment included clinicians and support staff experienced in GMV facilitation, as well as appropriate spaces, ranging from conference rooms to a large auditorium and kitchen remodeled specifically to accommodate group visits. Adding integrative health care to GMVs was, a relatively small change in practice, building on existing resources, even as it represented a larger change in understanding what counts as health care.

Despite the invisibility and uncertain etiology of many kinds of chronic pain, IGMVs generally took the presence of patients' pain for granted. Health care staff (n=28) in this study reported that it is very challenging to treat chronic pain in the brief individual visits that are all

standard primary care can offer. Adisa explained this as her motivation for providing IGMVs, saying, "I wanted to do something about chronic pain because people were always coming back to us [in individual visits] and nothing was getting better." Given the challenges of individual pain care, some providers initially assumed that treating multiple patients with chronic pain together would be even more difficult. Instead, they found it to be a better experience for both patient and provider. Specific aspects of GMVs that make them potentially advantageous for chronic pain are beneficial for many health conditions: more time, peer support, and opportunities for education. Louisa, a provider, felt so strongly about this that she wanted GMVs to be available to all patients with chronic pain:

If I had my way, I would have every single chronic pain patient in a group It allows people's voices to be heard and people to be understood and people to share, to commiserate.... It's a community feeling. Chronic pain is incredibly isolating.... Having people be together automatically makes it better.

Louisa emphasized how shared experience among patients helps chronic pain by breaking isolation. She also demonstrated how GMVs were taken for granted as beneficial at her clinic: amidst multiple uncertainties about pain and its treatment, GMVs were deemed one of the right tools for chronic pain treatment (Clarke and Fujimora 1992).

The second condition that makes IGMVs possible is a large population of patients with chronic pain. Because chronic pain is more common amongst people of low socioeconomic status (Janevic et al. 2017), safety-net clinics serve especially high numbers of people with chronic pain. This meant that clinics could fill IGMVs even though not all patients with chronic pain were interested in participating. Though I did not systematically ask about opioid use, it was clear from observation that patients with a wide range of pain-related diagnoses and experiences with opioid medication participated in all groups. In some, providers prescribed opioids, while others required individual visits with patients' primary care providers for opioid prescriptions.

In one group, the facilitator asked everyone to say why they were attending. A young African-American man said quietly, "everybody [outside of the group] says I cry too much." A young white woman said that outside of the group she was "just completely dysfunctional...I have a voice here." Later, group members took turns naming the sources of their pain, including carpal tunnel, sciatica, osteoarthritis, fibromyalgia, hip fractures, and gunshot wounds. The young man said he came to group because other people in his life criticized his reactions to his pain. The young woman felt unable to function in her experience of pain and didn't have anyone to talk to about it. Their experience of pain outside of the group included feeling stigmatized and solitary, but IGMV staff and peers created a space where these emotions and uncertainty about how to treat the pain that provoked them were both welcome. One facilitator said, "These are not our super compliant, ready to take on the world patients. These are patients who have been through it and just come for support. It's a really powerful model." She made the case that by not limiting the program to patients who were already coping well with chronic pain and adhering to treatment recommendations, the IGMV provided more meaningful support.

The third condition that enabled IGMVs was having clinicians with integrative health care experience, and, in some cases, their own experiences with chronic pain. The development of IGMVs was not driven by policy change or patient requests. Instead, staff with training in particular complementary health approaches made specific kinds of programs feasible. For example, one clinic had staff trained in acupuncture and massage, and offered weekly, ongoing acupuncture and massage groups to a rotating set of patients. Another clinic developed a curriculum based on Mindfulness-Based Stress Reduction (Jacob 2016) and provided a nine-session group to a consistent set of patients. Both models included biomedical care that made the IGMV reimbursable by Medicaid and other insurance. Katherine explained how she came to develop IGMVs for chronic pain:

Working in a very busy, underserved setting...there is a lot of depression, and there's a lot of pain. Those are two really difficult needles to move in the setting of traditional 15-minute

visits. We were also...really wanting to see how we could drive some [integrative medicine] services into what we do. It seemed very obvious to bring together this mindfulness piece with the integrative medicine [and] the medical group visit.

Katherine began IGMVs to bring an integrative approach into primary care and applied it to chronic pain and depression because these were challenging to treat in individual care. This combination felt obvious because Katherine had experience with both GMVs and integrative health care. She and her colleagues saw patients' health improve in response to both approaches, making them the right tool for the job of addressing chronic pain. The IGMV program they developed was shaped by other programs they were aware of, specific complementary health approaches that they or their colleagues were able to provide, and other organizationally bound contexts.

Safety-net providers generally made decisions about what kinds of integrative health care to offer by using locally available resources rather than by pushing for institutional or policy changes to make specific kinds of programs possible. Though a relatively small number of clinicians at each site facilitated IGMVs, many of their colleagues referred patients. Jossalyn explained:

[Patients] are already convinced. They feel that their pain is at a level where they'll try anything. So, if I'm going to take all these pills and it's not working, okay. If I've tried physical therapy it's not working. What else is there? And it comes from their [primary care] provider. So, I think the providers give [the IGMV programs] the best recommendation because the doctor's like "okay, we've tried all this stuff, you really need to try acupuncture. This will really alleviate your pain." And having that referral to us and then we call and say "hey, you know I got this referral from doctor so and so" and [the patient says] "oh, yes great when can I get in".... Acupuncture I've seen changes people's lives here. I've seen people walk in bent over and now they standing up straight.

The robust IGMV program at Jossalyn's clinic was possible because both patients and clinicians were open to integrative care. Jossalyn described how this openness stemmed from uncertainty about pain and its treatment. In this clinic and elsewhere, IGMVs were created as the right tool for a doable problem—that of expanding access to integrative health care for chronic pain.

Innovating Together

I found that in IGMVs, patients and providers responded to uncertainty with innovation. In Chapter 3, I described how patients in IGMVs took active roles in each other's care, and providers participated in groups in ways that were distinct from individual care. Here I find that the structure of IGMVs allows providers and patients alike to respond to uncertainty around what constitutes safe and effective chronic pain treatment.

The existence of IGMVs for chronic pain is, in itself, a major innovation on the part of providers, and willingness to participate is a form of innovation by patients accustomed to individual care. Laura, who helped design an organization-wide chronic pain IGMV program, explained that "chronic pain is the bane of [clinicians'] existence in some ways, but [group visits are] actually a really fun way to work with chronic pain patients." Where individual visits for chronic pain are often rushed and conflicted, IGMVs provide space for the emotional components of pain as well as immediate experiences of pain relief through complementary health approaches.

I observed groups with structured curricula, such as those modeled on Mindfulness-Based Stress Reduction, others focused on particular complementary health approaches such as yoga, and others that allowed patients to shape the group's content. Noemi, a staff member in multiple IGMVs, described how some included "activities with the groups...whether it's cooking, meditation, writing a book, it just depends on what the groups want to do." Noemi's clinic focused their GMV programs on empowerment, which staff defined in part as supporting patients in "trying new things," as a way of building social connection and meaning. They involved patients as co-creators more than most IGMVs, though providers still held particular expertise and access to resources that made IGMVs possible. This was acknowledged by both patients and staff, who maintained that in a context dominated by brief individual visits, the very existence of IGMVs was still an experiment.

Most patients and providers did not expect that IGMVs would eliminate people's pain.

Instead, they took an incremental, flexible approach to addressing pain, tinkering with multi-modal

interventions but not expecting too much to happen at once. Clarissa, an IGMV facilitator, described how she and her colleagues focused on believing patients and supporting them with the physical and emotional uncertainties of pain:

A lot of people come from their doctors feeling like, "they think I'm crazy. They cannot find any definitive event that triggered this event, and they tell me to relax. It's in my mind." It's a little bit of a challenge. Nobody invited their pain, nobody created their pain. Relaxing helps, but it doesn't eradicate[pain]. We have to be really careful about not blaming the victim. It's tricky. [We want our patients] to feel believed and not suspected as drug-seeking or attention-seeking. They are really in that much pain and really trying to find some ways to deal. We're not purists. A lot of people smoke cigarettes, smoke pot, eat a lot of junk. We never say, "stop doing that," we just say, "start doing a little more of this, this and this."

Clarissa described how both patients and providers innovated in IGMVs. Providers emphasized harm reduction (Vashishtha, Mittal, and Werb 2017), encouraging patients to tinker with daily habits, perhaps smoking a bit less and meditating a bit more. Clarissa's colleague, Tara, said they hoped

that [patients'] reported pain is going to decrease, so their experience with their pain will decrease and their depression will decrease. So far, we've seen that... A big part of it is not changing the pain and that's the mindfulness part... We're not asking you to go off of your medication for these things. The hope is that they'll develop a different relationship with their pain, and I've definitely seen that.

In addition to tinkering with health-related behaviors as Clarissa described, Tara talked about how the IGMV encouraged patients to think about pain differently.

Patients echoed this, saying they were learning to focus less on eliminating pain, and more on learning to cope with it. Leonard, a white man in his 60s in one of Clarissa's groups, said,

I have one friend who thinks I'm nuts [for coming to the group] ...I said "Why not? I'm meeting people and something they say might help me, something I say might help them."...I'm not looking for drugs, I'm looking for comfort, that's why I tried this alternative--the acupuncture, breathing, meditation.

Leonard attended the group for help finding alternatives to the opioid medications he received from his primary care provider and was uncomfortable depending on, but also to help other people. While Leonard wanted to stop taking opioid medications, he hoped the group would provide 'comfort,' not total pain relief. He meant both the comfort of being among people sharing a similar experience, and the comfort that might be provided by treatments like acupuncture. Patients and providers agreed that treating chronic pain is typically a long-term effort and saw IGMVs as an innovation, one of several right tools.

Other patients talked about mindfulness meditation and other complementary health approaches as giving them new ways of thinking about pain. Donna started attending the mindfulness-focused IGMV because she wanted to "stop taking the oxycodone [because] this medication is making me nauseous, making me sleepy." After ten years of chronic pain, Donna had first tried meditation and other complementary health approaches in the IGMV a few months before we spoke. She had started meditating daily and though it didn't make the pain go away— "when I would go to the [group] I'd always be a six or a seven as far as pain"—she found it helpful to "just deal with the pain." Patients and providers both had realistic perspectives on the benefits of complementary health approaches, while believing they could contribute substantially to changing the lived experience of pain.

Complementary health approaches were used in IGMVs to give patients an experience of immediate albeit temporary pain relief. I observed a pain group where patients received acupuncture while reclining in folding chairs and listening to recorded ocean sounds. The acupuncturist asked each patient about their pain, sleep, and stress and inserted the needles. Several patients and two service dogs fell asleep, and most other patients closed their eyes. Most woke up smiling twenty minutes later to the acupuncturist removing needles and another staff member reading a guided meditation. Providers said in interviews that they saw great benefit in providing immediate pain relief, which patients could experience themselves and watch others experience. In some ways this

paralleled the kind of immediate pain relief offered by opioids, while affirming that something other than opioids could be helpful.

IGMVs for pain have multiple goals including minimizing or discontinuing use of opioid medications. I did not systematically ask about opioids. However, both providers and patients talked about decreasing opioids as an innovation, possible in part by patients shifting how they thought about pain. Like most providers, Adisa did not systematically track patients' opioid use, but said "I've seen a few people come off [opioids]. The majority of [IGMV patients] have really come down." Patients from three organizations reported that IGMV participation allowed them to willingly discontinue opioids, though their chronic pain continued. Ruth was actively decreasing her use of opioids when we met. Her primary care provider had suggested lowering the dose after Ruth started participating in a yoga IGMV as well as walking and gardening groups. She explained, "I was on a lot of heavy hydrocodone, and since I've been here, taking my yoga [group], and doing all the other classes, I'm down to [a lower dose]." When Ruth's doctor suggested decreasing the dose she answered, "Okay, let's see if it works. I don't have a problem with it.' We want to see if the yoga's working...We can't very well determine that if I'm taking a lot of heavy drugs. For me, it's working.... I feel fine. I feel good. I'm in control of my pain." Ruth talked about reducing opioids as a collaborative process rather than a demand from her doctor. She viewed the IGMV as helping to control her pain and to cope with the remaining pain in new ways.

One example of collaborative patient-provider innovation was the joy scale in intermittent use at one clinic. Most IGMVs asked patients to rate their pain on a standardized pain scale each time they attended. In one group, I watched patients share scores on the pain scale and the "joy scale" developed by a patient named Charles. He said he got frustrated that people always asked about his pain. "How come nobody ever asks me how my joy level is?" That day, Charles said his pain was a 3 and his joy was an 8. Another patient said her pain was 10/10—make that 8/10, in her

back, hip, and knee. As for the joy scale, she was at a 5 because she was "fighting with hospice, sisters, attorney, step kids, great grandkids." Later, Charles explained that he had been using opioids to treat a painful degenerative condition for decades before IGMVs had changed his life: "That's exactly what I was looking for, something that I could do myself that wasn't a narcotic...It's very empowering to have some control." When we spoke, Charles had been participating in weekly IGMVs for about a year and his pain was drastically improved. He had substantially decreased his use of pain medications and lowered his blood pressure enough to discontinue two hypertension medicines. Charles was able to control his healthcare experience by sharing critiques of the pain scale and suggesting other ways for patients to describe their health. The joy scale, like the pain scale, quantifies health, and the familiar format may be why his doctors readily accepted this innovation. Two years after I met Charles, one doctor told me, "Now we consider the joy scale one our vital signs [in group visits], a way to assess wellbeing." Here, uncertainty created space for patients to innovate alongside providers and the presence of peers meant this innovation was taken up by other patients. It is worth noting that in this case, a white-appearing male patient spoke up about his critique and offered an innovative companion to the pain scale that his (also white) health care providers responded to enthusiastically. Charles drew on a medical model and innovated on it, and providers innovate by using at a group level.

Providers and patients viewed IGMVs as providing better chronic pain care than individual visits while in many cases also addressing its comorbidities. They described success in redesigning care and improvements in individual patients' health. By adding complementary health approaches, sometimes reducing opioids, and strengthening peer support, their incremental innovations yielded positive results. The uncertainty of living with chronic pain and seeking safe and effective treatment meant that many patients felt desperate to try new approaches. Rose, a patient in a weekly yoga IGMV, explained:

I was in bad shape when I first went [to the group] ...It was hard, but I stuck with it, because the more I did it, the better I felt.... I like going to yoga class. They make me feel welcome... All of [the staff] make you feel special when you go in... I fit in with all of them at the yoga class. I'm here for my health.

Rose said there had been substantial improvements in her pain and "Now I don't take all that [pain] medicine like I used to." Like Rose, all of the patients in the yoga class were middle-aged and elderly Black women. Rose described herself as having few friends. "I'm by myself," she told me. "I'm walking this earth by myself." In addition to living with chronic pain caused by a traumatic experience many years ago, Rose saw a psychiatrist regularly. Rose's experience demonstrates how frequent interaction with peers and caring clinic staff can address social isolation in ways individual care cannot. In the IGMV she learned new skills for coping with pain and stress, received needed medical care, and was supported by a group of women, many of them also living with chronic pain. The structure of IGMVs is inclusive of people living with trauma, depression, and other mental health issues. Providers and patients suggested that bringing together multiple people with varied relationships to pain changes the way people relate to their own pain, and to the opioid medications that have proven ineffective and unsafe for many. In IGMVs, multiple forms of collaborative innovation made this structure possible.

Conditions of Limitation

IGMVs at these clinics exist as an innovation by individual providers, not as an organizational reform, which is both a strength and a limitation. The programs are flexible, ad hoc efforts to improve care rather than a response to health care policy changes. Without substantial investment from organizations, much less the state and federal bodies that determine Medicaid policy and fund care for the uninsured, IGMVs are neither receiving new funding nor creating a

robust service delivery system. Uncertainty about complementary health approaches limits public investment in integrative health care. At the programs I observed, clinicians were aware of the growing evidence base for complementary health approaches but were not necessarily building the specifics of their programs in response to research. Instead, they were hopeful that complementary health approaches could benefit their patients and structured their programs in response to bureaucratic uncertainty and available resources. Here I focus on two conditions of limitation: stratification and non-optimal treatment regimens.

Although IGMVs were created to address stratification in access to integrative health care, some level of stratification continues in these programs. This appears to be in part because of their emergent, opportunistic structure. Stratification was most visible in limited access to IGMVs for non-English speakers and people with severe mental health conditions, with notable exceptions. One site, which did IGMV research, had formal inclusion and exclusion criteria for participation; for example, pregnant patients and those diagnosed with schizophrenia or other specific mental health conditions were not permitted to participate. At other sites, primary care providers and those facilitating IGMVs made informal decisions about who would be an appropriate IGMV patient. Two of the four organizations only offered integrative group visits for pain in English despite serving many Spanish-speaking immigrants and offering other GMVs in Spanish. At a third site, a Spanish chronic pain program was in a pilot stage without plans to continue.

Oscar offered IGMVs for Spanish-speaking patients with chronic pain. He described this approach as a culturally concordant form of care for his Latina/o immigrant patients:

[They] don't like to take...opioid medications for pain...if you talk with a Latina person and you offer them alternative medicine, they are very interested [in part because] it reminds them of the medicine they used [in their home countries] they learn a modality of treatment of that isn't just prescriptions.

Oscar viewed complementary health approaches and peer support element as helpful to all patients, particularly amidst uncertainty about opioid safety. He underscored that these two aspects—both missing from standard care—are things that many of his Latina/o immigrant patients are familiar with and receptive to. I asked many IGMV staff about the absence of Spanish-language IGMVs for pain. Lindsay noted that "There haven't been any providers who have expressed interest in ...taking on a group" and hypothesized that fewer Spanish-speaking patients used opioids. The one site that made all IGMVs accessible to Spanish-speaking patients served a predominantly Spanish-speaking population. They generally did not divide IGMVs by language; instead, staff would interpret between Spanish and English as needed to ensure that patients could understand each other. Where Oscar maintained that IGMVs are particularly beneficial to Latina/o patients, other sites described the decision about offering IGMVs in Spanish as dependent on the interests of individual providers rather than an organization-level assessment of patient need or interest. At no site was there discussion of offering IGMVs in languages other than English or Spanish or providing interpretation in IGMVs for patients who spoke other languages.

IGMVs do not provide therapy, though some are co-facilitated by mental health care providers. According to providers, most groups included people with active addiction, concurrent mental health diagnoses and extensive experiences of trauma. However, some sites excluded patients with more severe diagnoses (what one summarized as "bipolar, schizophrenia, and any form of psychosis"). Bethany, a clinician, explained that at her organization, "there's an unspoken, or informal [understanding]... if somebody's moderately to severely mentally ill, they shouldn't be in group. Basically, that's about disruption, disruptive behavior, not about them." Individual providers' comfort with particular mental health conditions varies, and this shapes which patients are welcomed into IGMVs.

Other providers described how they supported patients with mental health issues to participate in IGMVs successfully. Grace, a physician, saw GMVs as most needed by patients who were "hard to reach," especially due to trauma. She asked, "How do you make a group work for those people? Because they're obviously the folks that need that support more than anyone." Adisa described how she and colleagues responded to GMV patients with schizophrenia, dementia, or active drug use. Most common, she said, was "people over-medicated on their schizophrenia [medication], where they fall asleep in their group...I'd say, 'Mr. So-and-so, I think we better talk to your [primary care] provider about your Haldol'...We get it adjusted, but I haven't had anything where it's gotten uncomfortable, rowdy, violent." Adisa saw some patients struggle to participate in IGMVs and viewed this as an opportunity for communication with other clinicians to improve care. Stephanie, a support staff member, explained that

[Some patients] when they're not in a good mood, or if they're used to taking a certain medication and they don't take it...they can come here off kilter sometimes and maybe say something really mean to somebody else or make somebody cry or make somebody angry.

Stephanie mediated between patients in such conflicts, which typically allowed patients to continue attending groups together. Expectations of patients' behavior and interactions may be more flexible at some sites than others, and it appears that some staff work hard to enable a wide range of patients to participate. However, it is also likely that patients who might benefit from IGMVs are not referred to them because of clinicians' diagnosis-based assumptions about who is an appropriate IGMV patient. I assume that this variation exists in part because IGMVs are developed and sustained by individual providers. If these programs were implemented at an organizational level, attention to stratification might be greater; however, it is also possible that this would result in diagnosis-based referral guidelines that might exclude more patients with mental health issues.

An additional condition limiting the expansion and effectiveness of IGMVs for chronic pain is the difficulty of providing what clinicians consider to be optimal integrative treatment. Research on complementary health approaches has not necessarily established optimal dose and duration of treatments provided in IGMVs. However, clinicians' own ideas about optimal treatment often cannot be implemented due to limited resources and lack of reimbursement for complementary health approaches. For example, Louisa was able to provide acupuncture in IGMVs once a month at maximum. However, she said, people with longstanding chronic pain should receive ongoing weekly acupuncture for maximal benefit. "[Monthly acupuncture in] group care is super great if and when you can find space for that stuff. It's not frequent enough to be considered an actual treatment [for chronic pain]." Acupuncture offered in the IGMV, then, acted more as an introduction to a potentially helpful treatment. At another site, rotating groups of patients attended acupuncture IGMVs approximately once a month, with no limit on how long they could attend. Staff noted that patients benefitted from acupuncture, but not as much as they would with more frequent treatment. Clinics made do with available resources, developing systems of referral and scheduling that maximized how many people could receive some treatment.

Some IGMVs invested deeply in one treatment modality, but this was generally only possible when a biomedical clinician had additional training: a physician/yoga teacher, or physician trained in acupuncture. Other IGMVs introduced patients to multiple modalities: Louisa, trained as an acupuncturist but employed primarily in another role, typically visited IGMVs every few months. In between, other staff facilitated meditation, herbal compress-making, and cooking. Louisa's remarks point to the connection between immediacy and duration of treatment effects. Acupuncture, for example, can provide immediate pain relief, as demonstrated in the vignette above. However, Louisa made the case that for patients with long-standing chronic pain to get maximum benefit, they need frequent treatment over an extended period of time. Neither site with acupuncture IGMVs

was able to offer frequent, ongoing treatment, and as a result, patients were not getting maximal benefit that might allow some to discontinue opioids. There is certainly clinical uncertainty about dose and duration of integrative pain treatment, but it is bureaucratic uncertainty that limits resources in the safety-net, with explicit effects on how programs are structured.

The absence of frequent, long-term integrative treatment is a direct result of the fact that Medicaid and Medicare did not generally reimburse for acupuncture in California or Massachusetts at the time of my research. This was also true for most other complementary health approaches, with the notable exception of chiropractic care, which I did not see offered in any IGMVs.

Uncertainty about what high-quality pain care entails, and whether low-income people deserve the public investment required to provide it, means health care reimbursement policies limit accessibility of integrative care. Though clinics created workarounds that allow for some access, staff contended that this resulted in limited treatment effectiveness. At the same time, the absence of reimbursement may be what has made IGMVs possible. Clinicians responded to limited resources and lack of state investment in complementary health approaches by developing a multi-modal form of treatment that they believe is better than standard individual pain care. They respond to pain treatment guidelines that were not written with their patients in mind and innovate with available resources to provide the best care they can for their structurally vulnerable patients.

Discussion and Conclusion

"You think we're trying to take down the whole wall? It's enough to make a crack . . .[i]n order to imagine everything that could be done tomorrow." (Galeano 2015)

In this article, I argue that integrative group medical visits are an emerging intervention made possible by the opioid crisis and a broader set of uncertainties related to pain, biomedicine, and complementary health approaches—all intensified by safety-net patients' limited access to care. The

ongoing crisis of opioid use, safety, and efficacy has created space for new kinds of health care, as well as shifting policies in criminal justice and social services. This parallels the early years of HIV/AIDS, when the absence of effective biomedical treatment resulted in some openness to forms of care not commonly reimbursed for other health conditions. For example, federal Ryan White funds were used in San Francisco and other locations to make acupuncture and other complementary health approaches accessible to people with HIV/AIDS (Moffett et al. 1994). I argue that chronic pain creates similar uncertainties around treatment for vulnerable communities. Safety-net clinicians demonstrate the potential of IGMVs to increase access to integrative health care, treating chronic pain without causing additional harm. Particular conditions make IGMVs possible, including acceptance of group medical visits as a worthwhile model; large populations of patients with chronic pain and limited access to integrative health care, and clinicians who have experience with integrative care. These conditions allow patients and clinicians to respond to uncertainties by innovating together in IGMVs.

Patients and staff report that their innovations are successful in many ways; they describe IGMVs as improving care for chronic pain and its comorbidities at the organizational level and benefitting individual patients' health. Yet IGMVs continue as an innovation by individual providers, not an organization-wide reform. Such ad hoc innovations in clinical practice are both flexible and limited in what they can achieve. Without substantial investment at the organizational and government levels, IGMVs are the right tool for a certain job, but one that ought to be accompanied by other tools. Low-income people's lack of access to integrative health care help make IGMVs possible, even as lack of reimbursement limits their growth and scope.

Ad hoc efforts to increase access to integrative health care are, to a limited extent, able to overcome structural and cultural barriers to access. IGMVs create a small crack in the wall of US health care, supporting patients with chronic pain through a combination of peer support, time with

providers, meaningful access to complementary health approaches that they likely wouldn't access elsewhere, and—for some—opioid and other pain medications. Providers in this study do not claim to be seeking or achieving systemic reform, though many envision a health care system that advances health equity in part through extensive access to integrative care. As I will address in future scholarship, providers report that offering care in IGMVs allows them to practice the kind of medicine they find most helpful, in some cases preventing burnout and departure from safety-net primary care.

Community health centers have a history of taking up innovative approaches to care, from the now widely used "chronic care model" (Anderson and Olayiwola 2012), to GMV programs like Centering Pregnancy (Rising and Quimby 2017). IGMVs are a newer innovation, alongside efforts to reduce opioid prescribing and increase the use of medication-assisted treatment (including through GMVs) for patients struggling with opioid use (Doorley et al. 2017; Suzuki et al. 2015). My research points to the promise of IGMVs for treating chronic pain and decreasing opioid use.

Other innovations also seek to address this crisis, including Medicaid waivers in several states that allow reimbursement for acupuncture, massage and other complementary health approaches to treat chronic pain and opioid use (Clemans-Cope et al. 2017; Weeks 2017). It is easy to imagine IGMVs being implemented as part of these programs, and indeed it may already be happening; clinics with IGMVs rarely publicize them.

IGMVs use social support to address the isolation and loneliness that are worsened by chronic pain (Klinenberg 2016). Some clinics in this study have invested in creating spaces where group-based programs run all day. Patients participate in IGMVs and some visit most weekdays for exercise classes, free vegetables, and tobacco cessation groups. Transition between group sessions are punctuated by people greeting each other enthusiastically and hugging each other goodbye. IGMVs and these broader spaces create opportunities for healing from community trauma,

rebuilding connections that have been disrupted by migration, neighborhood violence, and other traumatic experiences that contribute to chronic pain (Lee 2013; Nicol et al. 2016; Pinderhughes et al. 2016).

Where dissemination of health care interventions often begins with the most privileged and trickles slowly, if at all, to those served in the safety-net, IGMVs have the potential to do the opposite. Paul Farmer draws on Catholic liberation theology to argue for a preferential option for the poor, focusing on providing the best care possible to low-income people. He maintains that since illness has a preferential option for the poor, health care providers should do the same (Farmer 2004). Patients and clinic staff viewed IGMVs as better care, despite being primarily if not exclusively available in safety-net settings. They do not assume IGMVs will eliminate people's pain, but rather that they will lead to empowerment, resilience, and improved health.

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Conclusion

"Type 2 diabetes is a disease of stress.... Continual stress exhausts the pancreas. Then we're told to cut out the foods that comfort us, exercise when we're bone weary from struggling, and do it as individual patients, on sheer willpower. What if we told a different story about diabetes? What if we said the pancreas has gone on strike from loneliness, from homesickness, from uprootedness and isolation? What if we created healing cells made up of four or five diabetics whose job was to help restore each other's roots and cultivate group solidarity? What if they shared meals, cooked for each other twice a week, went on walks together, strategized about protecting their bodies from the stressors in their lives, cried and raged about what's been awful and unfair...Tenderly chopped and cooked and seasoned what made them feel most at home in themselves. What if their story was not one of defective organs, unruly appetites and laziness? What if it was a story of homecoming?"

-Aurora Levins Morales (2013: 40)

Dissertation summary: motivation, context and strategy

This dissertation analyzes the use of integrative group medical visits as an innovation in the process and structure of care in community health centers. This investigation was motivated by concern about inequalities in health care delivery, and how inequalities in care drive racial/ethnic and socioeconomic disparities in health outcomes. It is well understood that health care inequalities are reproduced through a combination of interpersonal, institutional, and structural factors. I have sought to bring attention to IGMVs as an example of how changing the structure and process of care may address health care inequalities. As a witness to the power of group care in patients and providers' lives, I was particularly interested in how this model is being combined with complementary health approaches.

From a theoretical standpoint, I am interested in what makes innovation possible in settings with limited resources. Without policy change or expanded reimbursement, what conditions motivate change at local levels of health care? Amidst bureaucratic standards and practices (insurance billing, electronic health record, etc.) as well as a great deal of individual variation between

clinics and providers, how does change happen? This research was completed at a time when the Affordable Care Act was expanding access to biomedical care for patients in the safety net. This expansion, however was stratified by geography, income, and legal status. Though California and Massachusetts had expanded Medicaid, other states had not, and undocumented immigrants were excluded from public and private insurance. Despite the ACA's potential for expanding access to integrative health care for some, Medicaid and Medicare still did not reimburse for most complementary health approaches. However, the clinics I studied were taking advantage of a moment of general expansion in access to care, combined with their own investment in GMVs, as a strategy for treating chronic conditions and providing prenatal care.

Previous studies of IGMVs have generally been mixed-methods pilot studies focused on feasibility and health outcomes. I developed an exploratory survey to examine the scope of safety-net IGMVs throughout the US and used qualitative methods to gain an in-depth understanding of four organizations with established IGMV programs. These methods allowed for examination of how IGMVs have been implemented and what providers and patients think about them, with a focus on patients who use complementary health approaches despite being part of population groups that are statistically less likely to access these forms of care.

Key Findings

This dissertation includes three article-length manuscripts based on original data. Chapter 2 presents the findings of my exploratory survey, which examined the structure and scope of IGMV programs in the US. The survey reports 41 distinct organizations offering IGMVs in 11 states.

Nearly two-thirds of respondents reported that their workplaces offered IGMVs for diabetes and/or chronic pain. Notably, the complementary health approaches most commonly offered in IGMVs

were ones that did not necessarily require highly trained or licensed practitioners: nutrition, mindfulness/meditation/breathing, and tai chi/yoga/other movement practices. All of these are taught by highly trained practitioners in other contexts, but in community health centers are often taught by biomedical clinicians or support staff with a limited amount of specialized training. This indicates how IGMVs are feasible because community health center staff make do with the available resources. Clinicians reported a need for additional organization support, including adequate support staff and staff trained in complementary health approaches. They reported many positive aspects of IGMVs, including positive changes to patients' physical and mental health, as well as shifts in patient-provider relationships. The second part of the chapter is a commentary that engages social science critiques of integrative health care and how they relate to challenges of defining and describing IGMVs.

Chapter 3 examines key practices that allow for participatory care in IGMVs, improving patient and provider satisfaction with care and representing a potential challenge to the hierarchy of typical patient-provider interaction. I found that patients took on different tasks than in standard care, such as checking each other's vital signs, and that providers intentionally made space for patients to draw on their experiential authority. Providers also acted differently than in standard care, including dancing with their patients and sharing information about their own health. This was a shift from primary care's typical emphasis on all staff members working at the top of their license or scope, to placing relationships at the center of care. Finally, I found that in IGMVs, peers played an active role in each other's health care, supporting, challenging, and advocating for one another despite the constraints of the clinical care space.

Chapter 4 focuses on chronic pain treatment in IGMVs, with an emphasis on how safety-net settings are permeated by uncertainties connected with chronic pain, opioid safety and effectiveness, and access to complementary health approaches. I find that IGMV providers respond to

organizational conditions of possibility, including existing group visit programs; large populations of patients with chronic pain; and clinicians with interest and experience in integrative health care. The specific treatment offered in IGMVs is not necessarily grounded in the ever-changing evidence base for non-pharmacological chronic pain treatment. Rather, they are the approaches that providers and organizations find most feasible. Patients in turn generally enrolled in IGMVs in response to providers referrals or fliers in the clinic waiting room. In IGMVs, patients and providers innovate together, shaping the structure of the group and their roles within it as explored in Chapter 2. Many patients and providers preferred IGMVs over individual care for chronic pain and described benefits to both patient health and provider job satisfaction. However, organizational and structural conditions, including lack of reimbursement for complementary health approaches, both made this kind of care possible and limited its growth.

Chronic pain care is an emergent finding in this study that is present across all chapters. Chapter 4 focuses specifically on the use of IGMVs for chronic pain. It is also worth noting that three of the organizations where I did research are using GMVs to provide medication-assisted treatment (typically buprenorphine) for opioid addiction and chronic pain. IGMVs and GMVs more broadly have potential to be used widely to treat chronic pain and related conditions, but the logistics of implementation are complicated by the lack of public insurance reimbursement for complementary health approaches.

Other cross-cutting findings across the three chapters related to how IGMVs can support mental and emotional health in the context of addressing physical health needs. This is possible because many complementary health approaches are beneficial for both physical and mental health, but also because of the peer support and extended time with clinicians that are core elements of IGMVs. Providers and patients alike pointed to benefits of IGMVs that they struggled to describe; they used words including "resilience," "empowerment," "healing" and "connection," and patients

talked about the experience of being included and connected with peers across differences in age, race/ethnicity, language, and disability. This study suggests that embedding peer support within a medical context, in combination with access to complementary health approaches that many patients cannot access elsewhere, provides synergistic benefits.

Theoretical Contributions

This dissertation contributes to theoretical literature in several areas: health-related crisis and uncertainty, integrative health care, patient-provider interaction, and social and structural determinants of health. In focusing on IGMVs for chronic pain, my research contributes to both empirical research on how to address today's iatrogenic crisis of chronic pain treatment, and theoretical literature on health-related innovation amidst uncertainty. As both academic and popular sources have noted, this is not the first American medical crisis about treating pain (New York Times Editorial Board 2018; Wailoo 2015). The current crisis opens up space for possible responses that have not previously been politically feasible, both in health care and in other areas including criminal justice and social services. This in some ways parallels the HIV/AIDS epidemic, in which the crisis of a new illness began with uncertain etiology, moved into uncertain treatment, and then into uncertain access to treatment. As Epstein (1996) and other social scientists have described, in the case of HIV/AIDS, lay knowledge in the form of activism by patients and people close to them led to significant policy changes related to medication research and access. Increasing access to treatment has made HIV what is now recognized as a treatable illness, increasingly seen as a manageable chronic condition (Darling 2016). In contrast, in the past few years chronic pain is increasingly seen as dangerous in that opioids, the primary accessible treatment, are now publicly viewed as life-threatening. As a result, ongoing policy shifts are working to make opioids less

accessible (Esquibel and Borkan 2014; Hurstak et al. 2017). In the early years of HIV/AIDS, the absence of effective biomedical treatment resulted in some openness to structures of care not commonly reimbursed for other health conditions. For example, federal Ryan White funds were used in some locations (including by the City of San Francisco) to pay for access to acupuncture and other complementary health approaches (Moffett et al. 1994). I argue that chronic pain creates parallel uncertainties around treatment for vulnerable communities, and that IGMVs are an emerging intervention whose growth has been made possible by the opioid crisis.

This dissertation contributes to the evolving literature on integrative health care and complementary health approaches, previously framed as complementary and alternative medicine (CAM), folk medicine, or traditional medicine. My work demonstrates tensions between the potential of integrative health care to co-opt and medicalize a variety of treatment modalities, and the pragmatic nature of access-focused interventions that include integrative health care. IGMVs are not necessarily what providers or patients would choose as an ideal form of care, but I show that making do with available resources leads to a form of integrated care that many see as better than existing alternatives. Because of their multi-modal nature, IGMVs have unique benefits to patients and staff alike. As I discuss in Chapter 4, IGMVs aim to make a crack in the wall of the many problems with US health care, not disassemble the entire wall (Galeano 2015). Yet many providers acknowledged and shared critiques of the limitations of medical pluralism and integrative health care (Baer 2004; Gale 2014). Specifically, they expressed concern about simplification of complex systems of healing in the process of integration into biomedical settings with their bureaucratic infrastructures and concerns about litigation.

I also contribute here to literature on patient-provider interaction, and the roles of patients and clinicians in health care interactions. GMVs have not yet been included in this key area of medical sociology. I find that patients and clinicians can play flexible roles in GMVs, made possible by

extended time together and multiple patients in the same space. The presence of multiple patients—unique to GMVs--affects how both patients and providers act in the medical interaction, and thus changes relationships between them. GMV clinicians have enough time to *both* provide needed care and act outside of their typical clinical role. This allows those who value patient knowledge to make space for it as not only important but constituting a form of care. When clinical knowledge is not the only authoritative knowledge, patients can act as "a force for care" for one another (Garcia 2010: 68). Patients described clinicians as people with both specialised clinical knowledge and relevant experiential knowledge. These flexible roles demonstrate that patients, clinicians, and other health care staff can act expansively outside of their typical place in a health care hierarchy.

Another place that clinicians are being asked to move out of typical roles is in efforts to recognize and respond to social and structural determinants of health. In his book addressing the health of farmworkers, physician-anthropologist Seth Holmes asks, "How might the practice of medicine change if clinicians paid attention to the social critiques presented by the suffering bodies in our offices?" (2013: 193). Activist-providers are asking their colleagues to express "evidence-based outrage" at poor health outcomes caused by racism (Eichelberger et al. 2016) and speak out publicly about the effects of climate change on health (Koh 2016). As a member of the UC Berkeley-UCSF Structural Competency Working Group, I engage with interdisciplinary groups of clinicians and researchers who are asking, what would health care look like if clinicians recognized structural issues as part of health? We use a structural competency framework (Hansen and Metzl 2016) to students and providers across a range of health care professions who are interested in taking on this kind of work in and outside of their clinics, whether by developing medical-legal partnerships or speaking out publicly about the community-wide health impacts of police violence. GMVs have not been explicitly theorized as a structural intervention. However, I observed that extended time and regular meetings can allow for the creation of health-focused communities

among patients and clinic staff, in which providers can gain an understanding of patients' lives outside the clinic, and patients can speak together about the structural and social conditions that affect their health. As I referenced in Chapter 3, researchers and advocates connected with the international Black Lives Matters movement have presented universal access to health care as one piece of needed "reparations focused on healing ongoing physical and mental trauma" (Movement for Black Lives 2016). They call for community control of health services by those most impacted by health care inequalities, such as undocumented immigrants and Black Americans. Patients and clinicians in my research articulated how group visits and other interventions in the process of health care can address trauma at the individual and community levels in ways that bring people out of social isolation and into community participation. In GMVs, I see the potential for a kind of emancipatory health care (Rodrigues et al. 2018) that would draw on popular education (Freire 2014) and structural competency to not only provide individual care but take collective action to improve health care services and other conditions in patients' lives.

Lessons Learned and Implications

IGMVs come out of the need to make do with limited resources, using well-established GMV models to integrate and increase access to complementary health approaches. However, as I have discussed above, patients and clinicians in my research emphasized the valuable synergy of multiple kinds of care. They did not see IGMVs as second-class care, but as models that ought to be refined and expanded to serve patients across and potentially beyond the safety net. However, lack of Medicaid and Medicare reimbursement for complementary health approaches was a major barrier to improvement and expansion of these models in safety-net settings.

Though GMVs are increasingly common, guidelines for billing public and private insurance for care provided in groups remain unclear (American Academy of Family Practice n.d.; Telligen, the Quality Innovation Network National Coordinating Center 2017). Despite the Affordable Care Act's requirement that health insurance not discriminate against any licensed provider (US Congress 2010), reimbursement for care provided by licensed non-biomedical providers such as acupuncturists and naturopathic doctors remains stratified by geography and the vagaries of the private insurance market (Stanley 2015; Whedon et al. 2017). For example, Medicaid in several states reimburses naturopathic doctors as primary care providers, but in many states naturopathic doctors are not licensed, and neither private nor public insurance reimburses for their care (Federation of Naturopathic Medicine Regulatory Authorities 2015; Goldstein and Weeks 2013). Given the lack of insurance reimbursement for most complementary health approaches, it is unsurprising that the approaches most commonly used in IGMVs are those that can be offered by biomedical providers with some specialized training or practice. Some clinics in this research had IGMVs that included other licensed providers such as acupuncturists or chiropractors. However, clinicians at many sites reported that they could only include such providers if they were volunteers or students, because clinics could not pay them without their visits being reimbursable. Broad implementation of the IGMV model would be more feasible if both public and private insurers provided reimbursement for a range of licensed health care providers such as naturopathic doctors and massage therapists. Insurance reimbursement would allow safety-net clinics to hire integrative health care providers, support the infrastructure needed at the clinic and organizational level to make these programs sustainable, and provide treatment at optimal dosing and frequency.

The political, theoretical and practical implications of this research are strengthened by its mixed-methods approach. The qualitative research provides a portrait of four organizations that have developed staffing, infrastructure, and varying levels of organizational buy-in to a variety of

IGMV models. The survey confirms that IGMVs are not limited to community health centers in progressive, urban areas with strong histories of integrative health care, and provides an introduction to the national landscape of safety-net IGMVs that future research and advocacy may build on. Several key informants for my qualitative research are doing their own research on health outcomes in IGMVs. Other provider participants in my qualitative and survey research expressed interest in participating in further research on IGMVs. Some suggested forming a collaborative group of IGMV providers and researchers to examine health outcomes across sites, a challenging but worthwhile effort given the tremendous variation in IGMV models.

Future Research Directions

With over 50 in-depth interviews, notes from 20 distinct IGMVs, and survey data from 57 respondents, I was not able to include all data analysis within this dissertation. I have several ideas for additional manuscripts using data from this project. Prior research has acknowledged high levels of satisfaction among GMV providers (Page et al. 2013; Shlosser 2012; Wong et al. 2015); however, providers' experiences of providing this kind of care has rarely been explored qualitatively. Many providers in my study described providing care in IGMVs as "the kind of medicine I want to practice" and "the only thing keeping me working at a community health center." I plan to write a manuscript using the theoretical framework of cultural health capital (Shim 2010) to examine providers' experiences of providing care in IGMVs. From a theoretical standpoint, this article will explore the elements of cultural health capital that providers hold, how they accumulate cultural health capital to exchange for better relationships with their patients, and how they attempt to transmit cultural health capital to patients. In addition, I will write a piece for a clinician audience focusing on how safety-net providers view GMVs as improving their jobs and preventing burnout.

An area of GMVs that has been underattended to is the role of support staff such as health educators, medical assistants, and community health workers. A growing body of research on community health workers has shown the benefits of including health care staff who are more likely (for a variety of structural and other reasons) to "share the lived and cultural experiences of the patients they serve" than many clinicians (Muse 2018: 21). I interviewed 11 support staff members as part of this project and observed many others in their roles as co-facilitators of IGMVs. I plan to develop an additional manuscript focusing on support staff members' relationships with patients and collaborative roles in developing, facilitating, and sustaining GMVs, bringing attention to this group of people whose work often goes unrecognized.

Finally, I plan to write an article about the broader use of GMVs for chronic pain treatment, collaborating with Sara Rubin, who has collected chronic pain GMV data at two additional safetynet sites. This article will review existing research on how GMV models are being implemented for chronic pain both within safety-net settings and more broadly and draw on qualitative data from the research that each of us has done. Staff who participated in this research had several repeated qualitative questions that could lead to future research. One of these relates to gender in GMVs: many groups were primarily attended by women, a few groups were specifically developed for either men or women, and staff and patients at multiple sites reported that it was generally challenging to recruit men to participate in GMVs.

Two avenues of broader future research have also arisen out of these findings. First, I was troubled by the limited implementation of IGMVs in Spanish, despite the fact that all sites in my qualitative research offered other GMV programs in Spanish. Though there is ample research on Latina/o immigrants and use of complementary health approaches, little of it has focused on chronic pain. Research on Spanish-speaking immigrants with chronic pain has largely focused on cultural and occupational issues (Brumitt et al. 2010; Bui et al. 2011; Hollingshead et al. 2016). I am

interested in exploring the experiences and needs of Spanish-speaking patients with chronic pain, including those who use opioid medications, those who use complementary health approaches not provided in clinical settings, and those who have access to some form of integrative health care. Such a project could specifically examine the state-level Medicaid pilot programs that are increasing access to integrative care for chronic pain, and further understanding of how Latina/o immigrants access biomedical and other forms of chronic pain treatment.

As I have described above, IGMVs and group visits in general address multiple elements of physical and mental health and have the potential to strengthen factors such as health literacy at the individual level, as well as to intervene on social determinants of health at the community level. I observed some IGMV programs that hinted at a more interdependent or community-level conception of health and am interested in taking a more comprehensive look at how community health centers' programming can go beyond improving individual health. Are there GMV programs that explicitly include taking collective action for collective health? What other efforts are community health centers making to address community trauma and promote community-level resilience? How are politicized frameworks of healing finding their way into clinical care settings, and what conditions make this possible?

Concluding Thoughts

This dissertation has focused on a complex innovation in health care, integrative group medical visits. Situated amidst the shifting landscape of safety-net care, IGMVs bring together other innovations that have grown rapidly: group medical visits and integrative health care. Rather than a single model of shared care, IGMVs include a wide variety of programs that are continually under development and revision to meet patients' needs and make do with available local resources. My

work highlights the national presence of safety-net IGMVs, the flexible roles played by patients and clinical staff in these care settings, and the potential for IGMVs as a multi-disciplinary approach to chronic pain treatment. I explore the experiences of patients, support staff, and clinicians who make do with resources available to them to create and participate in emerging forms of care: what a provider named Patty referred to as "community medical help."

I end with the story of Odetta, a patient who asked me not to tape-record our interview about her experience in a chronic pain IGMV. Her story demonstrates how trauma intersects with chronic pain in the lives of many IGMV patients. In addition, it shows how participating in IGMVs can have meaningful and unexpected effects, not necessarily related to directly to their chronic conditions. Even in an interview focused on the IGMV program, it was clear that Odetta had many more urgent concerns related to experiences of interpersonal and structural violence and loss. Yet she was also acutely aware of how things she was learning in the group were changing her.

Re-reading the notes I took during our fast-paced conversation, I remember that Odetta began by telling me that she liked the IGMV and that it helped her to talk. There has been so much loss, she says, a relative who died in jail, a loved one murdered, others who have died this year from violence, illness, and old age. She went on to tell interlacing stories about the multiple forms of violence she had experienced and the systems that had intervened too much and not enough with her and her family: child welfare, schools, police, health care providers who in all her visits to the emergency room didn't ask about domestic violence. She has documented everything, written it down, kept emails, and she is always reading, which is how she found a flier about the group. She wants to write a book or make a movie about everything she has been through, and throughout our interview repeated, "I cannot believe I'm going through this.... I've been robbed of a lot of things."

I asked Odetta to tell me more about being in the group. In the past, she said, "I thought you gotta be crazy to have a problem." Now she had a therapist and the group, where "it feels good

to let stuff out" and feel like "you're not the only one." She told me about a meditation they learned called the body scan and how, when doing it, "you really have a change, it's almost scary." She wanted the meditations they have learned on an audio MP3 for her phone, or a CD, something she can keep. And recently, she didn't yell at the bus driver when he didn't let her off. Instead she waited for the next stop and said "thank you, have a blessed day," something she said she would never have done before the group. This is a new way, she said, and though the old way got stuff done, the new way felt less stressed.

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