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Matthew Wolf-Meyer & Celina Callahan-Kapoor

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CHRONIC SUBJUNCTIVITY, OR, HOW PHYSICIANS USE DIABETES AND INSOMNIA TO MANAGE FUTURES IN THE UNITED STATES

Matthew Wolf-Meyer and Celina Callahan-Kapoor

Prognostication has become central to medical practice, offering clinicians and patients views of particular futures enabled by biomedical expertise and technologies. Drawing on research on diabetes care and sleep medicine in the US, in this article we suggest that subjectivity is increasingly modeled on medical understandings of chronic illness. These chronic conceptions of the self and society instill in individuals an anxiety about future health outcomes that, in turn, motivate practices oriented at self-care to avoid negative health outcomes and particular medical futures. At its most extreme, these anxieties of self-care trouble conceptions of self and social belonging, particularly in the future tense, leading patients and clinicians to consider intergenerational and public health based and the threats that individual patients pose for others.

Key words: anxiety, chronic illness, control societies, precarity, temporality

Running title: Chronic Subjunctivity

Media teaser: Can medical practitioners know the future of individual patients through their use of new technologies? Armed with this assumption, doctors and patients structure their understandings of health and well-being against the possibility of future disease, complications, and decrepitude. But these predicted medical futures are far from certain, and lead patients to shape their lives in risk-adverse ways to maintain dominant assumptions about self-care, and the care of the future.
In this article, we focus on two clinical settings to explore how ideas about the future shape the practice of physicians and medical staff in their care for others and of themselves, specifically related to type-2 diabetes and insomnia. We draw on Susan Reynolds Whyte’s work on ‘subjunctivity’ (2002) to explore what Bernard Stiegler refers to as ‘technicity’, the future-being that technology enables (1994). Central to our argument are conceptions of the individual and social body (Scheper-Hughes and Lock 1987), both of which are held in suspension in relation to the body’s future and its potential to develop medicalized disorders, thereby posing a risk to the individual, and potentially society. This attention to the future is applied to the lives of patients and to the practices of clinicians, as they use biomedical knowledge and technologies to reflect upon individual bodies, social belonging, and the futures that disorderly conditions might indicate – for individuals and their families, in the present and future. In thinking about social belonging as a process of mediating individuality and commitment to a community, we focus on the ‘collective imagining’ of the individual and society (Gatens and Lloyd 1999), bringing together concerns about history and the future, the body and how it is shaped through medicine, and more diffuse ideas about risk and precarity. In focusing on collective imagining, we draw together
subjective conceptions of the self and notions of social belonging, and also social recognition on the part of others and through institutions, specifically medicine. These concerns about the future, subjectivity, and social belonging make and remake corporeal and subjective experiences, forcing individuals to think about intergenerational health, society, and their future lives.

Focusing on the collective imagining enabled through biomedical knowledge and technology challenges the stability of biomedical ways of knowing as a fixed foundation for action, and questions the individual and societal futures created through biomedical technologies and the knowledge they produce. Medical anthropologists have often considered how risk and precarity have shaped individual self-understanding, community and national futures (Jain 2007; Montoya 2011; Povinelli 2011; Rapp 1999), and have demonstrated how ideas of history and everyday decision-making organize bodily self-understanding. What we add here is an attention to the technologies that enable future-being, namely medical technologies, social institutions, and the family. In putting together thinking about technics and collective imagining, we seek to conceptualize how biomedical knowledge enables particular futures that are shaped by bodies and shape bodies. The futures that are embedded in each of these biomedical technologies, bodies of expertise, and everyday institutions are not always the same. As they interact, they produce conceptions of the individual and society that defy simple medical prognostication and instead proliferate doubts and conditions of anxiety.

Physicians are able to read a set of symptoms, and, from that medical semiology, predict the life course of an individual; patients are asked to interpellate themselves into this mode of thinking about themselves as a subject through the predictive power of medicine, and its power to prolong life, estimate how long that life will be, and potentially make that life better. In both type-2 diabetes and insomnia, ideas about risk, the future, and the management of the body draw
attention to how social belonging, individuality, and family well being are shaped by medical institutions and governed by medical authorities. This governance often relies upon ideas about ‘chronic illness’ that enable particular kinds of therapeutic futures (Anderson and Smith-Morris 2010; Wolf-Meyer 2014); moreover, ideas of ‘health’ (Metzl and Kirkland 2010) and ‘fitness’ (Porter 1999) in this future-oriented temporal frame – often cast in the language of anxiety – become integral to how institutional actors think about patients and themselves as subjects and members of society. These future-oriented ideas about social belonging and individuality stress relationships to family, society and the nation, and depend equally upon emergent medical and scientific knowledge and ideas about personal and community histories (Heath, et al. 2005; Smith-Morris 2008). The exercise of medical power focuses attention on the future, including the care of the self in relation to one’s longevity and health, and the care of others in the conceptualization of how present-day actions will impact one’s children and grandchildren through intergenerational health.

But medical prognostication alone is insufficient when the lives of actors are put into their social contexts, where competing demands on subjectivity shape and reshape behavior and bodies to meet competing demands of ‘health’ and ‘fitness’. These competing medical and everyday futures create a context of doubt and anxiety for clinicians and patients, who must negotiate the social implications of disorder and the insufficiency of medical knowledge and treatment to produce cures, especially alongside the demands of non-medical everyday institutions (Wolf-Meyer 2014). This intensification of future-oriented forms of individuality and social belonging can most clearly be seen in ideas about public health and the relationship of the individual to society through everyday behaviors, medical treatment, and compliance with therapeutic protocols to obviate risks to society. For example, as reports of diabetes rates in the Rio Grande
Valley circulate, individual physicians, patients, and family members are constantly assessing whether their behavior is contributing to the economic ruination of the region and the nation due to increasing health costs. Concerns like these motivate the interventions of clinical staff as well as patients, who base their understandings of health not simply on conceptions of the self, but also in how an individual body is affecting and affected by society.

The evidence on which we draw was produced through two research projects, one on diabetes in the Texas/Mexico borderlands and the other on sleep in the Midwestern US. These two geographical perspectives illuminate how medical expertise is operating in the US during the early part of the twenty-first century to produce a particular form of future-oriented individuality and social belonging. Callahan-Kapoor conducted research on diabetes in Texas from 2010-2013, with participant-observation at clinics, health fairs, farmers markets, fitness events such as 5k races and ‘Zumbathons’,¹ and yoga classes. She also conducted interviews with people living with type-2 diabetes recruited through clinics and word-of-mouth, and analyzed epidemiological and media depictions of diabetes in the region. Wolf-Meyer conducted ethnographic research on American sleep from 2003-2007 in sleep clinics and research centers in Minnesota and Illinois. In addition, he conducted interviews with sleep disorder patients recruited through clinics and online support groups, participant-observation in support groups for people diagnosed with narcolepsy and sleep apnea, and archival research on the history of sleep science and medicine. Both of these projects are based in clinics, but follow clinical conceptions of medical disorders out into the worlds that they help to produce and are produced through.

Recently, social scientists and related scholars have identified a turn towards futurity as one of the intensifications related to neoliberal subjectivities. This builds upon primarily historical conceptions of the subject, which are the basis for more psychoanalytic and Marxian
understandings of subjectivity (Althusser 1971; Freud 1993 [1963]). They also build upon presentist conceptions of subjectivity, which often highlight the role of the performative in the social production of the subject (Butler 1997). Subjectivity predicated on ideas of the future invoke temporally-inflected conceptions like “optimism” (Berlant 2011), “precarity” (Povinelli 2006), and “subjunctivity” (Whyte 2002), which all index doubt over known history. Across this work, subjects are articulating their sense of self, society, and world in relation to a future that may be imbued with limitations and risks, which shape and are shaped by their bodies; these future-oriented forms of subjectivity can be read as individual interpellation into a generalized risk society (Beck 1992). Medical practice, diagnosis and treatment are emblematic of this future-oriented forms of subjectivity, visible in the rise of attention to ‘chronic illness’ (Manderson and Smith-Morris 2010). This is not to totally eliminate history as a feature of subjective reasoning, but to highlight that the past – of individuals, communities, society, and species – is increasingly conceptualized through the prism of the future. Writing in the context of postcolonial Uganda, Susan Reynolds Whyte (2002) identifies ‘subjunctivity’ as a product of living with a medical condition and the prognosticative powers of medical authorities. This move towards subjunctivity is central to contemporary modes of social belonging and individual subjecthood in the US, where medical institutions and popular conceptions of health and fitness are central for individuals to think about themselves and their worlds.

By providing a means to conceptualize the future of the individual and society as interrelated, medicine serves as a set of institutions and technologies to help build the body politic of contemporary society in the US – at both the level of the individual and society itself (Foucault 1994 [1963]; Scheper-Hughes and Lock 1987). By mediating social belonging through the use of the future tense, medicine and its conceptions of bodies and their potential for change
over time becomes a central node in the elaboration of individual subjectivity. The future tense enabled by medicine focuses on aging, disease and risk, all of which become functionalized in ideas about health and fitness for the individual, but also for future generations and society. In making this argument, we see that rather than being one among many disciplinary institutions that govern the lives of individuals that come into contact with it, medicine is one of the many overlapping, sometimes contradictory ‘control societies’ that shape modern subjectivity (Deleuze 1995 [1990]); instead of a monolithic cultural norm of behavior and personhood, which often motivated the actions of disciplinary actors, control societies rely on more abstract capacities that are acted upon and serve as the basis for personal development. Because control societies have competing and contradictory expectations of individuals, this produces doubt for the subject; he or she is put in a position to recurrently ask what the right norm is.

Consider here how ‘at risk for diabetes’ produces shifting and contradictory demands on actors as they move through multiple institutions that conceptualize social belonging in myriad ways. In a family, food, diet and exercise might be seen as integral to the future well-being of an individual and his or her family. However, not eating specific high carbohydrate foods might also be seen as an attack on cultural heritage or the labor of particular family members. In a clinical setting, high carbohydrate diets can be seen as threatening to the individual, his or her ability to work, and his or her health insurance status, as mediated by employers and the government. At work, an individual can be seen as antisocial by not eating with the group or at risk of dismissal due to costs associated with his or her healthcare. The individual is left to navigate these multiple demands, often with no clear path. Moreover, recommendations about diet and exercise shift continually, and individuals find themselves in doubt about what are the right things to eat and forms of exercise. Thus, rather than providing subjectivity with a secure foundation, the body
produced through medical prognostication and future-oriented forms of subjectivity serves as a site of anxiety and doubt, in no small part based on fears of future disease and decrepitude.

TYPE-2 DIABETES AND SUBJUNCTIVE SELF-MANAGEMENT

Celina Callahan-Kapoor conducted her research in the Texas/Mexico borderlands and focused on the everyday circulation and reception of popular media about diabetes, as well as the everyday experience of the condition on the part of patients, physicians, and members of the public.

Widely considered a ‘lifestyle’ disorder, type-2 diabetes is often associated with minority populations in the US (Centers for Disease Control and Prevention 2007). In the US/Mexico borderlands it is mapped onto Mexican American populations, attributed to a ‘bioethnic’ Mexican-ness (Montoya 2011). This can depend on a genetic explanation, which asserts that Mexican bodies are especially prone to developing type-2 diabetes regardless of behavior; in other contexts, predisposition recedes to the background in favor of attention to diet and exercise behavior, suggesting that anyone can develop type-2 diabetes given particular conditions. More often, these discourses operate together. Mexican-Americans struggle with a hereditary legacy that predisposes them to type-2 diabetes. But at the same time, this legacy is exacerbated by contemporary cultural expectations and apocalyptic proclamations that Mexican-Americans’ current rate of diabetes is a harbinger of the future ill-health of the US population (Fisher-Hoch, et al. 2010). In these ways, type-2 diabetes among Mexican-Americans is an exemplary site for the elaboration of contemporary future-oriented forms of individuality and social belonging, and
the shaping of subjectivity which depends not on one disciplinary institution to produce a stable, normative subjectivity, but a variety of sites of control, each with its own normative demands and embedded futures. In the following, we focus on the case of a Mexican-American physician who experiences symptoms related to type-2 diabetes and uses his place as a Mexican-American and physician to elaborate what is at stake in thinking about one’s past and future through medicine in the contemporary US.

Dr. Guerra grew up in a town about an hour north of the south Texas/Mexico border. Like many men of his age in the region who had received rigorous formal education, Guerra holds two professional degrees, one each in pharmacy and medicine. Like many Mexican-Americans in southern Texas, he sees his health status as a source of anxiety and a site where his sense of belonging to multiple communities is mediated; this is evident in his lifetime struggle with type-2 diabetes, which many in the region think of as a particularly Mexican disease (Cf. Montoya 2011). Guerra had his first ‘elevated’ glucose test in 1972, indexing ‘early diabetes’, when he was in his first year of medical school. He went to a doctor to have the diagnosis confirmed and once it was, Guerra was “devastated.” When Callahan-Kapoor asked him why, he said that it was primarily because of his time working as a pharmacist in the Rio Grande Valley. During those years, he handed out a lot of insulin to diabetics with end-stage or ‘uncontrolled’ diabetes, meaning they had foot or leg amputations, blindness, or were receiving dialysis. Therefore, when the physician confirmed that he had ‘early diabetes’, Guerra imagined that ‘uncontrolled’ future. And with that prognosticated future, he did what he thought would help reduce his chances of the complications related to long-term diabetes. He began running four miles each day and changed his diet to comply with medical guidelines. By the winter holidays of that year, he had lost 30 pounds and reduced his blood sugar levels.
Guerra experiences diabetes not only as a healthcare practitioner but also as a diabetic who engages in daily bodily care. In a private medical practice that he operates with a family member, Guerra sees most of the diabetics. He uses an approach called ‘negative framing’ (Levin, et al. 1998), and thinks that patients respond well – meaning they are more likely to make the recommended behavior change – when he tells them about all of the complications they will experience if they fail to keep their diabetes ‘under control’. Dr. Guerra is not the only one who uses this approach. Carolina, a woman in her late 50s, has been struggling with maintaining the recommended diabetes diet since her diagnosis seven years ago. The stress of everyday life and her husband’s on-again, off-again employment often push her to seek relief in extra food. She has recently had success in changing her eating habits – avoiding eating too many tortillas – by using the negative-framing technique of imagining the decomposition of her body due to uncontrolled blood-sugar levels. A clinical dietician told her she that when she is tempted to eat a tortilla, she should think to herself, “If I eat this tortilla, I’m going to lose my toe; if I eat this tortilla they’re going to cut off my leg.” Like Guerra, Carolina finds that she can alter her behavior in the present through the technology of medical prognostication; through imagining her body’s future decrepitude and dismemberment due to end-stage diabetes, she is given the basis to make a choice. In order to achieve his health ideals, Guerra tries to keep his average daily blood sugar level at 126mg/dL or less, a level associated with very low risk of diabetes-related complications, derived through medical technologies and a basis for his self-correction. Although he sees a local physician to get his prescription medication for diabetes, he sets his own routine for taking the medications, which is “usually about once a week.” When talking about his day-to-day management of diabetes, Guerra stresses both his philosophy of food consumption and “Mexican culture,” as well as popular explanations for diabetes among Mexican-Americans like heredity and genetics. Dr. Guerra believes that healthy eating – for diabetics and non-diabetics
alike – includes eggs, granola, yogurt, limited red meat, and vegetables. Although he is able to adhere to healthy eating when he is alone, he finds that being at home and also being part of the ‘Mexican’ culture of frequent celebrations such as baptisms, birthdays, and Quinceañeras makes it exceedingly difficult to maintain a healthy diet.

Over the years that Callahan-Kapoor knew him, Guerra renewed his commitment to weight loss and diabetes management multiple times. At one point, he joined a Biggest Loser competition; he won by losing seven pounds in one month. Then came the winter holidays and his weight went up. After this, he pointed to the sky and said, “I’m making a promise to God, not to my kids, not to my wife!” Despite winning the Biggest Loser competition and making a promise to God, Guerra’s weight of approximately 225 lbs. stayed the same the entire time Callahan-Kapoor knew him.

Although he was not able to achieve the weight loss that he desired, he was able to maintain his desired blood sugar level at around 126 mg/dL. For Guerra, maintaining that number depended upon food choices and medication. It was easier for him to manage his diabetes on a day-to-day basis while in medical school, living in the Midwestern United States, eating yogurt and granola for most meals. He has good days and not-so-good days in managing his food choices; he tries to stay consistent about poaching two eggs in his office microwave and drinking those for breakfast. He jokingly blames his wife for cooking food that is hard to refuse, and for buying foods with high sugar content, but said that his teenaged daughter helps keep him making ‘good’ food choices with her off-the-cuff comments such as, “You want to live to meet your grandkids, right dad?” when she sees him eating ice cream. These comments, like his recurring weight loss attempts, enable him to change his behavior for a few days or a week, but like many diabetics, he eventually started eating foods that he knew would raise his blood sugar.
Throughout these negotiations, Guerra is basing his subjectivity on his bodily well-being, often in relation to the demands or expectations of others – his daughter or wife – albeit in contradictory fashion. But through the prism of his projected future, he comes to rethink his past and its bearing on the present. Below, we detail how he uses a similar logic of bodily well-being and futurity to describe “diluting” diabetes genes to promote social belonging among Mexican-Americans in the region more generally, working against historical conditions and towards a future that might be free of health risks associated with a problem of ancestry.

When discussing his opinion of why the rates of diabetes in the region are so high, Guerra draws on the epidemiological description of diabetes as ‘multifactorial’, but he sees the illness as fundamentally genetic. The combination of what he sees as Indian genes and Mexican diet makes it “synergistically bad” to be Hispanic:

I think [Hispanics/Mexican Americans] got [diabetes] more from the Indians because I think the only people that have a higher diabetic rate than Hispanics are the Indians. I think American Indians might have a higher [rate of diabetes] and that's probably how we got it from mixing the local Indians with Spanish, we got this. So, it's not so much Hispanic. It's whoever has lots of Indian blood in them probably has lots of diabetes.

Diabetes is a disease that is multifactorial but it has a very, very high component of genetics and of course it's cultural, the cultural aspect with the diet does not help the genetic. It's almost synergistically bad to be Hispanic because of the bad synergy between the genetics and the bad diet. It's almost like one plus one is not two, one plus one is three in terms of badness for diabetes.
Dr. Guerra’s statement that being Hispanic is “synergistically bad” gathers together historical, presentist, and future orientations of subjectivity, but does so on an unstable ground. Neither genetic history nor food choice, nor medication, provide him with a surety about his future health or the health of his descendants. He must find a way to navigate those possible futures, leading to a state of chronic subjunctivity. First, in an age of attention to genetic explanations for chronic illnesses, an individual is burdened with the weight of ancestry, and particular racial and ethnic categories are seen as being especially deleterious to the modern, productive subjects; for Guerra, this is “Indians.” The individual must develop a regime of self-care that integrates attention to genetic predispositions, which becomes a balancing of past and future that lays the basis for everyday action informed by an assessment of risk. Second, Guerra sees “culture” as encouraging individuals to make decisions that may have negative long-term effects, particularly around “bad diet.” In these ways, Guerra formulates type-2 diabetes as a particularly contemporary disorder: individuals are brought into contact both with their deep histories and local expectations through the demands of the future, forcing them to shape their bodies and behaviors in ways to meet US norms of individuality and social belonging.

Guerra compares Texas to Vermont, particularly in genetic terms, positing that through intermarriage, “bad” genes that lead to diabetes might be ‘dilated’:

Callahan-Kapoor: When I first met you, you said, “So, if I go to Vermont are my genetics going to change, is my diabetes going to go away?”

Dr. Guerra: Well, in a sense that’s true because if you move to Vermont and marry someone from Vermont then that changes the genetics of the family and then you
are removing the genes. Or you think of it in a bad way also depends if you are a pessimistic person you could think of it as taking the bad genes to Vermont.

Callahan-Kapoor: Which way would you think of it?

Dr. Guerra: Well, since I’m part of the bad genes here, to me it’s good that my family would marry someone from Vermont because that would remove the bad genes. I have, you know my oldest son who has three maternal uncles that died either in their late 50s or early 60s from diabetes.

Later, he elaborated on how marrying people not from the Valley could help the future generations of his family:

So genetics is there and we doctors think about it more than others, so I was glad when my son married someone from Dallas who isn't Hispanic and didn't have a family history of diabetes. I thought that was wonderful because they were diluting that gene and there's a possibility that my grandchildren out of that marriage is going to result in kids that are not diabetic or have heart disease.

In these excerpts, Guerra is positing the future as a critical element in the management of contemporary everyday life; intermarrying and “diluting” “bad” genes leads to the production of individuals who in the future have healthy bodies – or at least the underlying conditions to be healthy through the right diet and exercise. In so doing, Guerra is positing a particular demand in the present for individuals who have “bad” genes, namely that they should think about their potential future children as they make decisions about who to reproduce with. If one does not
want her or his children to be precarious subjects in the future, decisions need to be made in the present to ensure the right kind of genetic mixing.³

For Dr Geurra, there is a different valence to having diabetes than to managing diabetes. Having diabetes is faultless, an unlucky genetic legacy that Guerra is squarely a part of, and a legacy that might be passed on to future generations through bad planning. By stating, “I’m part of the bad genes here,” he makes a claim of genetic belonging to the region and its history of “mixing the local Indian with the Spanish.” All he and other people who currently have diabetes can do is manage the condition, but he believes that moving to geographically distant places with lower rates of diabetes and marrying people without histories of diabetes could help reduce the rate of diabetes in his descendants and potentially make his self-care easier, as less tempting foods would surround him.

In his discussion of managing diabetes, the morally loaded language of choice and a negative view of the ‘Mexican culture’ emerge. In geographically distant locales, too, he implies it is much easier to manage diabetes, due to distance from ‘Mexican culture’. But across these two scales of analysis – the individual and his or her self-management and individuals and their hereditary burdens – Guerra is relying on the weight of the future to shape actions in the present, as individuals measure their behaviors and histories against potential risks. Despite the possibility that self-management might be easier and the burdens of future generations might be lessened, neither Guerra nor his patients are much interested in leaving the region. Thus, the option of ‘gene dilution’ to prevent diabetes is not as available as self-management of health and fitness. Guerra describes his own struggles to re-pattern his everyday life in a non-diabetic way and concludes that the region’s food and social customs, along with his genetic predisposition, create a diabetes-promoting everyday life. Indeed, after his years of struggle to re-pattern his everyday
life around healthy food and exercise only to fail time and time again, Guerra told Callahan-Kapoor that he had “caved” and started injecting himself with a non-insulin diabetic medication, Victoza. In a situation where the prognosticatory power of “one plus one equals three,” this turn to a medication is logical and provides individuals with a way out of the binds associated with bad choices for themselves and future generations.

When treating patients with ‘early’ diabetes, as he had done in the early 1970s, Guerra uses the power of prognostication. As Callahan-Kapoor shadowed him in the clinic one afternoon, they walked into a room to greet a woman in her mid-30s. While reviewing her lab results, Guerra told the patient that her blood sugar level was a little bit high, which meant that she would develop diabetes by age 38 or 40. Guerra made his oracle-like qualities clear when he told her, “Right now, only you and I know now that you will develop diabetes. When you’re at 6.5 (A1C) the whole world will know.” In an interaction that lasted no more than three minutes, he gave her this future diagnosis and offered two options: start taking metformin, the frontline medication to slow diabetes’ onset, or wait and take it once the diabetes develops. She decided to take the metformin, and asked if she could get a cheap generic. Beyond his own life and that of his descendants, we can see how medical ideas about normalcy depend on this use of the subjunctive; as patients are interpellated into this medical logic of control and subjectivity, they are confronted with the same questions that Guerra posits for himself: What are the right ways to self-manage one’s body? How do ancestry and history impact the present and future? How does one attempt to make the future known through medicine less risky with the aid of medicine?
INSOMNIA, ANXIETY, AND THERAPEUTIC GOVERNANCE

We turn now to research conducted among sleep clinicians and researchers by Matthew Wolf-Meyer. We are particularly interested in how anxiety and insomnia are taken to operate together, with anxiety about social obligations and personal care working to compound the experience of insomnia as a particular kind of sleep disorder. Anxiety is especially future-oriented, and clinicians, researchers and patients all report on how ideas about the future impact behavior in the present, often leading to a cascading effect: anxiety about not being able to sleep at night leads to an inability to sleep, which leads to further anxiety about not being able to sleep. Lack of sleep impacts how patients perceive their workplace and school performance, leading to escalating, pervasive experiences of anxiety. Insomnia, then, becomes a site where the individual’s relationship to society can be seen in an intensified fashion, and an exemplary site where physicians can intervene to produce the individual as a more orderly, less risky subject. Like the case of type-2 diabetes, insomnia points to how medicine helps individuals manage the future by seeing their future selves as at-risk due to their behaviors in the present and predispositions that are ascribed to historical conditions and ancestry.

During a staff meeting at the sleep clinic where Wolf-Meyer conducted his research, Dr. McCoy, the head pulmonologist, presented a case that he framed as being based in clinical judgments and ethical questions; he wanted to see what others thought of his treatment. The case was of a 60-something-year-old white man who had been experiencing symptoms associated with insomnia for the past two months, due, the patient claimed, to anxiety. The patient also claimed that the insomnia had taken a turn for the worse since a recent trip to Jamaica. The patient said that the anxiety stemmed from financial concerns at work and relationship discord: he and his
wife now slept in separate rooms. Since the romance in their relationship was gone, they had companionship only, but decided to remain married. McCoy treated the man with Lunesta, which worked for the insomnia, but the anxiety persisted. In a recent consultation the man asked for McCoy’s confidentiality and confessed to him that he was having an affair. The head neurologist, Dr. Richards, interrupted at this point, and, speaking for McCoy, said “I have to go. My mother’s calling me.” One of the staff pediatricians, Dr. MacTaggert, remarked that it was interesting that the man had come in for consultation for a ‘sleep’ disorder, to which McCoy replied “I do talk therapy on occasion.” He explained that the patient and his mistress had traveled together to Jamaica, where he was introduced to one of the woman’s ex-boyfriends. The patient quickly realized that there were unresolved issues between the woman and her ex: this sparked his insomnia. He went on to say that he and his lover have decided to seek relationship counseling, but that he and his wife would not be seeking the same mediation. McCoy then asked what he should recommend for the anxiety. Throughout, jokes were made about the wife having an affair, and in some convoluted way compounding the existing love triangle, like having an affair with the woman’s ex-boyfriend. Richards remarked that they should send him to a priest, who MacTaggert joked was probably the ex-boyfriend. McCoy expressed his concern that if he recommended the man to a primary care doctor that they would medicate the anxiety without treating its cause, and that the man needed to develop insight into his life instead. MacTaggert asked if the patient was open to counseling, and Richards said that he was seeking counseling, but only in relation to the ex-boyfriend. McCoy asked the collected staff members if one’s ethics allows setting something like counseling up for this man, who obviously had other problems that produced and compounded his anxiety. Richards praised McCoy for his treatment of the problem, which McCoy then described: he recommended the man to the local university’s program in human sexuality. One of the new research fellows in the clinic explained that this is really tame
for the program, and that they are used to dealing with “transsexuals and whatnot.” Richards joked that when the man walked through the door the staff at the program would yawn.

Joking aside, what this clinical discussion shows is how a variety of everyday concerns – one’s intimate and everyday relationships, one’s finances, one’s medical treatment – can become the source of anxiety, and that this anxiety can feed into other conditions, in this case insomnia. The joking of the staff is based on their own anxiety that the patient was seeking help for a ‘sleep disorder,’ when in fact he had a much broader set of concerns. Insomnia, both for the patient and the clinical staff, became something that could be focused upon and treated, but the anxiety was much more profound and its resolution depended upon the patient seeking therapy beyond the clinic. This belies the possibility that the man may return to the clinic: if his anxiety is unresolved in its current form or new anxieties are produced, his insomnia may return. Moreover, if his anxiety intensifies, the ability for his current pharmaceutical fix to work may erode, and the patient may need additional treatment to resolve his physiological concerns while still leaving his social concerns untreated. A diagnosis of anxiety-related insomnia provides all stakeholders with a sense of likely futures; even so, with the anxiety unresolved, the outcomes are doubtful both for the physicians and patient. The right technology, however, can mitigate these anxieties, whether in the form of a pharmaceutical, or like diabetes-derived lifestyle changes, a set of behavioral practices intended to produce particular kinds of subjects.

In the following, discussion of nighttime anxiety associated with sleep turns into a discussion about post-traumatic stress disorder (PTSD) and treatment through the use of sleep hygiene, a set of practices meant to change the behavior of individuals to facilitate orderly sleep. Sleep hygiene is a supple medical technology intended to address the likelihood that individuals will continue to have problems sleeping. As a technology, it anticipates a variety of causal
situations leading to poor sleep, which proper sleep hygiene can overcome. Dr. Palmer, one of the staff pulmonologists, presented the case of a man with delayed sleep phase, falling asleep regularly around 12:30 am, but with an “interesting actigraphy” with a burst of activity right before sleep onset. One of the staff pediatricians, Dr. Pym, offered that he knew one explanation for the burst of activity, implying sexual activity, and Palmer remarked that Richards had already offered that suggestion. What Palmer found out is that the man checks that all the doors to the house are locked and windows closed before bed, and that he runs around the house doing so. He said that he checked for other signs of PTSD, but that the “perimeter check” was the only symptom. He then went on to explain that the man wakes up at 5:30-6 am each morning, and that he gets just enough sleep to be able to get through his workday, with some sleep being made up on the weekends. Palmer explained that the man usually sleeps through the night, but that when he does awaken he ends up experiencing anxiety about not being able to go back to sleep, often spending the night staring at the bedside clock. Palmer advised him in sleep hygiene, and wondered aloud if people used the cognitive behavioral therapists on staff for such patients. McCoy explained that the clinical staff had been trying to do more cognitive behavioral therapy themselves, often teaching patients about sleep hygiene instead of relying on pharmaceutical treatments for insomnia.

Sleep hygiene is a set of practices that are roughly 200 years old, and focus on modifying behavior so as to reduce sleep-related anxiety: no strenuous exercise before bedtime, no heavy meals three hours before bed, no heavy alcohol consumption, turning away from clocks so as not to worry about what time it is, and to generally associate the bed and bedtime with sleep and relaxation. By promoting sleep hygiene, physicians are intending to shape behaviors against the threat that continuing the same bad behaviors will lead to a future self unable to sleep as
mandated by social obligations and in accordance with personal expectations. The combined set of practices that make up sleep hygiene produce a technology intended to respond to diverse settings that might otherwise distract from sleep; they anticipate a future of bad sleep and serve as a mechanism to mitigate doubtful situations, much like healthy diet and regular exercise work for type-2 diabetes.

These two cases are adults, but anxiety and insomnia are also evident in children, who often develop anxiety specifically related to sleep and their inability to sleep in an orderly fashion as outlined by parental expectations. For children, sleep hygiene is mediated by parents, which can depend on medical professionals interpellating parents into an intergenerational project not unlike Guerra’s understanding of the benefits of intermarriage on the removal of “bad” genes, a deliberate focus on limiting potential future situations. Along these lines, MacTaggert, one of the staff pediatricians, posited that anxiety is normal during particular developmental phases, and can result in nighttime anxieties when coupled with extra-stressful situations, like parents expecting children to be asleep by specific times. Sleep hygiene serves as a technology to mitigate these anxieties and stressors. MacTaggert then discussed the case of a 10-year-old boy with some night anxiety but no history of sleep disorders. Richards asked a fear of death was a source for the boy’s anxiety, but MacTaggert remarked that it was more nebulous than that and associated it with a middle childhood developmental phenomena wherein the child becomes more aware of the world and its dangers. The discussion then moved to a more general conversation about anxiety and depression, with an assumption that anxiety and depression are two sides of the same diagnostic coin: Dr. Xavier, the most senior neurologist on the staff, asked if a particular statistic were true – that 25% of children could be diagnosed with depression or anxiety. MacTaggert agreed that this was so; Richards stating that the numbers were the same among adults, with 25-
30% of adults being diagnosable with anxiety or depression. What is different in this case – and in some cases of insomnia – is that the anxiety is specifically associated with bedtime and one’s inability to sleep, often referred to as ‘primary insomnia’. Sleep hygiene can intervene here to attempt to produce orderly sleep, but the underlying developmental context can only be mitigated, not overcome, leading to the need to practice sleep hygiene rigorously.

This relationship between anxiety and sleep is even clearer in the case of an 8-year-old boy who experiences regular nightmares. According to one of the staff pediatricians, Dr. Pym, the boy had had one nightmare years ago. A few days after that nightmare, he was horribly burned in the night and admitted to the burn facility at the local hospital. Now, years later, the boy has nightmares two or three times each week, and always at either 1:30 am or 4 am, which may align with the architecture of his sleep patterns. His dreams primarily focus on his decapitation, or a hole in the ground of the basement at home where the laundry machine is, although in neither case are the dreams recurrent in their total content. These dreams had been occurring for two and a half years and caused severe sleep-onset anxiety, leading to primary insomnia. He also experienced confused arousal twice a month, as does the boy’s father and grandfather, but Pym remarked that the mother is able to tell the difference – when the boy awakens from a nightmare he approaches his mother’s bed and asks for her help. Pym referred the boy to the local Children’s Hospital, where an integrative health facility for children will teach him relaxation techniques. Richards asked if this was “legitimate or touchy feely yamma yamma,” to which Pym replied that it sometimes involves the use of “healing touch.” Richards replied that that was all he needed to know, and Pym responded by saying that Richards was just too old for healing touch to work on him. Richards then remarked that it was not how someone was touched, but where – all of which was generally laughed at by those assembled.
The move that the clinicians make in this case – from a boy with primary insomnia associated with a traumatic event to joking about “healing touch” and integrative health – belies the seriousness with which they approach the patient’s situation. Rather than medicate the child, Pym recommends him for meditative practice with the hopes that his anxiety can be eased. Insomnia, in this case, is seen primarily as a byproduct of the boy’s anxiety, and although it could be treated with a pharmaceutical, this would fail to address the boy’s future problems associated with his anxiety. Insomnia might be fixed with a drug, but the anxiety would remain, leading, potentially, to an anxious adulthood. Like the inculcation of sleep hygiene into bedtime practices, Pym seeks out a way to remove the boy’s anxiety altogether, in the hopes that it will also mitigate the boy’s insomnia, and potentially also his nightmares.

Across these four cases of insomnia, clinicians are invested in managing the future; they are interested in managing the subjunctive belonging of the patients to society by reducing anxiety. By finding ways of treating anxiety that produces insomnia, the clinicians attempt to integrate individuals into normative society. The methods they use, particularly meditative practice and sleep hygiene, are meant to be supple in their abilities to respond to the varied situations in which an individual might find him- or herself; these therapeutic techniques anticipate anxious situations where the future is unknown by providing technologies that should be able to respond positively. These simple medical technologies grow out of medical prognostication, as physicians know patients will find themselves in anxious situations in the future and potentially develop insomnia again. By providing individuals with therapeutic practices, they provide them with the means to rectify fissures in collective imagining of self and society, enabling individuals to mitigate their estrangement through everyday practices. But these
practices may also fail, and this leaves individuals in a doubtful position: when will the insomnia return?

**CONCLUSION: IMPLICATIONS FOR A SOMATIC PUBLIC**

From the perspective of medicalization, it might behoove doctors to enroll anxious insomniacs in drug regimens that fail to totally resolve their anxiety and insomnia, thereby keeping them in the medical system and providing them with a stable basis for subjectivity. In treating anxious insomniacs in this way, they would be treated analogously to type-2 diabetics, who depend upon pharmaceuticals to maintain their health – and who also need to develop strategies to cope with the situations in which they find themselves, where social expectations of belonging come into play. But we might instead see the removal of anxiety associated with sleep as a means to open up the possibility that anxiety will adhere to physiological experiences that are less associated with neoliberal ideals of productivity and efficiency. In other words, in the context of modern workdays and school days in the US, insomnia can be particularly debilitating because of general social interest in productivity. Instead, today, it serves capitalist interests to be anxious about a more ambiguous category, like one’s health or fitness. As in the case of type-2 diabetes, anxiety associated with one’s diet, exercise and health can lead to integrating into medical expectations of behavior and compliance, and thereby abide by the embedded futures implied in specific techniques, technologies, and treatments. Whereas insomnia might expose the negative potential of contemporary modes of future-oriented subjectivity, namely that an individual feels disconnected from society because of his or her bodily experiences, we might see the clinical and
self-management around type-2 diabetes as the positive side of the same phenomenon. That individuals like Guerra anticipate a particular future for their bodies and manage it in specific, medical and extra-medical ways, indicates the depth of desire not solely for life, but for social belonging, and belonging of a particular sort. How this might lead to new forms of society that extend beyond the purely medicalized depends on how the society we collectively imagine is defined, as well as our role in it as risky, benign, or beneficial.

As medicine and medical treatments become salient ways for individuals to collectively imagine themselves and their relations to society (Dumit 2012; Martin 2007), this way of thinking about the futurity of a body and its impact on one’s social status and belonging is moving out of the clinic and into society more generally. In this respect, Guerra serves as a harbinger of this more generalized way of thinking and its potential impacts on the lives of individuals. If people in the US collectively imagine individuals and society primarily through normative bodily experiences counterpoised to threats to public health, self-treatment as in Guerra’s case or anticipatory behavioral practices like sleep hygiene may become more dominant models of self-care. This intensification of the future in self-care as enabled through medical prognostication is not wholly new; rather, it builds upon historical forms of subjectivity, but in ways that center medicine as integral in its powers to know the future and to provide means to navigate that future for individuals. These powers provide a means for individuals to navigate the many competing demands towards normativity embedded in modern society, and provide mechanisms to shape society in particular ways. This results in the elaboration of technologies – like dietary and recreational self-care and sleep hygiene – that are intended to address any potential future situation, but simultaneously have embedded expectations of the future. These expectations presume doubtful and anxious possibilities, both for the individual and society, and
place the burden of conformity on the individual, who is induced to future oriented self-care practices. Chronic subjunctivity means always anticipating particular futures wrought through medical technologies and expertise, but never knowing which future will manifest; technologies of self-care mitigate the doubtful situations individuals find themselves in, but offer no cessation of anxiety.

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ENDNOTE

1 Zumba is a popular exercise format that incorporates dance elements into aerobic practice, often including salsa and merengue music, which draw on the musical traditions of its Colombian inventor, Beto Perez.

2 Blood sugar levels of 126 or less throughout the day are considered normal and, therefore, not associated with the complications of diabetes such as eye damage and blindness, kidney failure, and nerve pain. See http://www.mayoclinic.org/tests-procedures/a1c-test/basics/results/prc-20012585. Accessed May 26, 2015.

3 Theories of mestisaje, or ‘mixed-race’ status, as a positive emblem of Mexicanidad and Mexican national identity as well as a source of national, bioethnic discrimination, have been well-documented. While Guerra’s case could be analyzed through a lens of mestisaje, what we argue here is that his narrative of diluting blood, intermarrying with Anglos, and movement north indicate a more ‘American’ theory of racial purity (Alonso 2004; Hartigan 2013; Knight 1990; Stern 2005).