

**Diagnostic Trajectories: The Entanglement of Resources, Diagnoses, and Bodies in Mexico
City**

By

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Abstract

Recent conversations within medical anthropology have moved from what biomedicine claims to *know* about the world, to what biomedicine *does* in the world. Specifically, various authors have suggested that the act of diagnosis, rather than just describe a disease, has the power to produce the material reality of a disease. I push the conversation regarding what diagnosis does further by arguing that the kinds of healthcare resources a person has access to in their search for a response to their own or a loved one's health conditions shape what diagnoses they acquire, which in turn have material effects on the bodies and life circumstances of that person. I trace how the diagnostic trajectories of two working class families unfold in the healthcare landscape of Mexico City to examine what resources they each have access to, what kinds of diagnoses they each acquire, and what bodily effects are produced as a result. Through these two case studies, I propose "diagnostic trajectories" as a way to theorize diagnosis as a complex process in which economic circumstances, changing healthcare landscapes, medical expertise, and family dynamics interact in looping relationships to shape the bodily conditions and life circumstances of the people involved in a diagnostic trajectory. By conceptualizing diagnosis as a situated and consequential process, tracing diagnostic trajectories provides a way to contribute to anthropological analyses of how particular settings reproduce and distribute health inequities.

Introduction

Ando como que a ciegas...como que supongo que es esto, supongo que es el otro... y una [doctora], la, la anterior... de la que hizo las pruebas psicométricas, ella si, si le puso en el reporte que lo que tiene [es] un retraso de edad y que no podía entregarme un reporte a ciencia cierta porque Isabel oscila, y yo le pregunté en ese momento que es oscilar...

I am walking as if I were blind... like I think it is this thing, then I think it is another... a doctor, the previous doctor, the one that did the psychometric tests, she put on the report that my daughter [Isabel] has a developmental delay, but she couldn't give me a definite report because Isabel oscillates, and so I asked her then, what do you mean she oscillates...?

-Yaneth, November 13th, 2014.

As she sits in the her second floor kitchen of her working class neighborhood of Mexico City, Yaneth describes the intense frustration of desperately seeking a diagnosis for her daughter, Isabel, who suffers from an obvious but undefined cognitive delay.¹ The urgency Yaneth feels to respond to Isabel's condition grows as she gets older. She sees her daughter falling behind in school and worries that, as she nears puberty, her innocent friendliness towards relatives and strangers alike will put her in danger. Impelled to do something in response to her daughter's health conditions, Yaneth continues searching for a diagnosis through a patchwork of providers in the hopes that it will help her access resources to stabilize Isabel's future. But because she lacks consistent affordable health insurance, and is unable to sustain the expense of private medical care, obtaining a definitive diagnosis and treatment for Isabel's conditions is difficult. As she tries and fails to receive a diagnosis from one practitioner after another, her frustration grows. Yaneth is disillusioned by the directionlessness she is confronted with: "I am walking as if I were blind..."

In the same Mexico City neighborhood, a few blocks up and around the corner, a different mother experiences a different kind of complex diagnosis experience in regards to her

¹ All names of participants have been replaced with pseudonyms to protect their privacy.

daughter's health conditions. For years, Alma's daughter Mar had asthma. But then suddenly when Mar was seven years old a doctor informed Alma that Mar's frequent coughing and difficulty breathing are linked to a cardiac arrhythmia. It turned out she never had asthma at all.

They detected a, a cardiac arrhythmia in Mar... she has an arrhythmia, I mean, they realized that her heart beats, and then suddenly it stops, and like that another time, it goes for a moment, and then stops another time, like that... They put on an apparatus; they call it a Holter Study... They put that on her for a few days to see how it turned out, and they already gave us the results and yeah, it came out a little altered... The one [the arrhythmia] she has is a cardiorespiratory one... They say that it isn't asthma, there; they told us that it isn't asthma. She gets red and all that, she can't breathe, because her oxygen doesn't circulate well..."

-Alma, February 23rd, 2017.

After years of giving Mar medications and altering Mar's behavior based on her asthma, a medical practitioner replaced asthma with a diagnosis of cardiac arrhythmia. Interestingly, Alma did not react to the diagnostic shift with anxiety, anger, or frustration. She took the change in diagnosis in stride and remained confident in her ability to respond to Mar's health conditions, despite the change in her knowledge about what those conditions were.

In this thesis I examine the status of diagnosis in these two cases of working class families in Mexico City. At first glance, both cases might seem to involve diagnostic uncertainty; Mar's diagnosis changed abruptly, and Isabel never had a clear diagnosis. However, with further analysis, it becomes clear that Mar's diagnostic trajectory did not involve uncertainty. The name assigned to Mar's health conditions (the diagnostic category) changed, but her mother's ability to respond to those health conditions remained stable. Mar and Alma's diagnostic trajectory displays certainty in practice. However, Isabel's case, in which she does not have a clear diagnosis and Yaneth feels paralyzed in her ability to do anything in response to her health conditions, is deeply uncertain, provoking anxiety for her family. This uncertainty is due to her family's inability to do something about Isabel's cognitive delay: an uncertain diagnostic

category is both partially caused by and reproduces precarious economic circumstances and inconsistent relationships of healthcare and educational support.

By investigating what characterizes diagnostic certainty in Mar's and Isabel's stories my thesis is in conversation with recent discussions in medical anthropology that have moved from what diagnosis *is*, to focusing on what diagnosis *does*. Many social scientists of medicine have described biomedical practice, including the act of diagnosis, as concerned with "pinpointing internal bodily truths" (Lock and Nguyen 2010, 42).² More recently, other authors have critiqued this idea, arguing that diagnostic knowledge is never certain, as diagnosis is about *doing*, rather than *knowing* (Stonington Unpublished manuscript, January 2018; Street 2014). Stonington, as well as Street, argue that diagnosis does not generate precise knowledge about a disease; rather, the practitioner's objective in giving a diagnosis, and the patient's objective in acquiring one, is to mobilize resources in response to a person's health conditions (Stonington Unpublished manuscript, January 2018; Street 2014). In this thesis I examine diagnosis in these two cases to ask the following questions: What does diagnosis do? How do diagnoses get made in each of these stories? What makes both the diagnosis of asthma and that of cardiac arrhythmia certain for Alma, and what causes so much uncertainty for Yaneth? And, finally, what material effects does a diagnosis produce?

Diagnosis serves as a means to end for both Alma and Yaneth—a definitive diagnosis has the potential to mobilize resources on their daughter's behalf. Both Mar's and Isabel's cases involve their mother seeking ways to secure the bodily wellbeing of her young daughter. In both trajectories, diagnosis—or in Yaneth and Isabel's case, a lack thereof—affects which medical

² See also Rosenberg "The Tyranny of the Diagnosis" (Rosenberg 2007) for a discussion of how the diagnostic process grew out of and reproduces notions of disease specificity, which posit the existence of disease entities that are universal in ideal type and are located and can be identified within individual bodies.

services each mother can access in response to her daughter's affliction, such as attention from healthcare providers, diagnostic technologies and reports, advice from medical practitioners, and therapies and treatments. Mar's and Isabel's stories diverge in that their mothers have access to different relationships of assistance to respond to their daughter's health conditions. In this thesis I follow how Alma and Yaneth seek a way to respond to their daughters' health conditions, in order to trace what resources they each have access to, what kinds of diagnoses they each acquire, and what bodily effects are produced as a result.

I call Mar's and Isabel's stories diagnostic trajectories in order to capture the concept of trajectory as the path an object moves along under the action of particular forces. Anselm L. Strauss together with other sociologists (1997), theorized the term trajectory in relation to illness and healthcare decades ago. Strauss and the co-authors defined an *illness trajectory* as something distinct from an *illness course*, arguing that the latter refers to the physiological unfolding of a disease, while the former refers "to the total *organization of work* done over that course, plus the *impact* on those involved with that work and its organization [emphasis original]" (Strauss et al. 1997). By defining illness trajectory as the social organization of medical work and the impact that has on the "experience and identity" (39) of participants, these authors reify the distinction generally upheld between "illness" as the social experience of an affliction, and "disease" as the biological reality of an affliction. The illness trajectory, they argue, begins after diagnosing the physiological reality (20). In this way, they assume the biological reality of a disease unfolds on its own terms, independent from the work done by medical practitioners, family members, and patients to manage the illness course.

While I agree with the authors' use of the term trajectory to denote the practices and resources involved in shaping a sickness experience, I disagree with their assumption that the

social forces involved in influencing the path of a disease only act on it after identifying (through diagnosis) an objective underlying physiological reality. Additionally, I disagree that the forces that act on a disease affect only the social experience, biographical stories, and identities of the actors involved in an illness trajectory. I use the term diagnostic trajectory to convey my understanding that diagnoses and the physiological processes they name are not objective, biological realities that unfold on their own terms beneath the social forces that act independently from them. Physiological realities, differential access to medical resources, practitioners', family members', and patients' experiences, age and gender, and the distribution of healthcare resources within a specific historical and sociopolitical landscape of a healthcare system all coalesce to enact (Mol 2002) the reality of a disease and a diagnosis. The path of a diagnostic process (recognizing and responding to an affliction) moves under the action of such forces.

Furthermore, the impact of how a specific diagnostic trajectory unfolds cannot be broken down into either social or physical effects. The kinds of healthcare resources a person has access to in their search for a response to their own or a loved one's health conditions shape what diagnoses are enacted (Mol 2002), which in turn have material effects on the bodies and life circumstances of that person. Thus, a diagnostic trajectory is a process in which social, physical, and environmental forces are entangled in ways that shape bodies and life circumstances.

By narrating Mar's and Isabel's diagnostic trajectories and tracing how they are each situated within the Mexican healthcare landscape where they take place, I argue that what is at stake in accessing health care resources in the diagnostic process is not only an ability to recognize and respond to health conditions. Diagnosis is not just about recognizing diseases within bodies. Diagnosis is a complex process in which economic circumstances, changing healthcare landscapes, medical expertise, and family dynamics interact to shape the bodily

conditions of the person being diagnosed. Considering how the resources one has access to and acquires in a diagnostic trajectory enact particular kinds of diagnoses, and thereby cause particular material effects, facilitates recognizing how a particular healthcare landscape reproduces and distributes health inequities.

My argument about diagnostic trajectories builds on a body of literature within medical anthropology and the social sciences of medicine that theorizes bodies, diseases, and diagnostic processes as relational and situated (Landecker 2016; Lock and Kaufert 2001; Mol 2002; Niewöhner and Lock Forthcoming; Roberts and Sanz 2018; Lock 1993). By showing how bodily states and medical practices always involve complex interactions between life circumstances, physiology, scientific practices, and social worlds, these authors problematize the tendency to think of disease as a natural (not social) biological process and diagnosis as the evidence-based assertion of knowledge about disease.

Margaret Lock developed the terms “local biologies” and later “situated biologies” to describe her argument that biological and environmental (social, political, historical, physical) forces constantly interact to shape each other. “The concept of local biologies, points to the inseparable entanglement of material and social processes and encourages an analytical sensitivity towards the situatedness not only of knowledge and practice, but also of the material body itself” (Niewöhner and Lock Forthcoming, 6). More recently, Lock has shifted to the term “situated biologies” to refer to how bodies and environments continually co-constitute each other in entanglements of physical-social forces (19-21). Biologies are situated within time; within spatial geographic, social, institutional, and physical environments; and within dynamic practices of human behavior (Niewöhner and Lock Forthcoming). Here, I draw on the concept of situated biologies to show that diagnosis is not simply a process that interprets one underlying biological

reality. The search for a diagnosis involves interactions between specific diseases and the particular institutions, resources, and technologies available in a healthcare landscape. These circumstances affect what kinds of diagnoses get made, which in turn have very real, material effects on the physical body of the person seeking diagnosis. The diagnoses produced in a particular healthcare landscape both reflect and shape local biologies. In other words, diagnosis and diagnostic trajectories are situated.

Other authors within medical anthropology have also developed ways to theorize the entanglements of bodies, environmental conditions, and sociopolitical processes (Landecker 2016; Niewöhner 2011; Roberts and Sanz 2018; Roberts 2015). Roberts developed *Mexican Exposures* (MEXPOS), the project upon which my research is based, to bring biological and ethnographic data together in symmetrical analyses of the “complex conditioning entanglements that produce bodily states” in Mexico City (Roberts 2015). MEXPOS understands bodies, environments, and research processes as relational, and seeks to investigate “how phenomena, including geopolitical processes and participants’ life conditions, are created through intra-active looping” (Roberts and Sanz 2018, 754).³ Hannah Landecker theorizes situated, entangled body-environments by using the term “biology of history” to describe how the specific scientific, political, and social histories of a particular time period transform the microbiological environment that moves between individual bodies, collective populations, and environments (Landecker 2016). Jörg Niewöhner proposes the term “the embedded body” to describe “a body that is heavily impregnated by its own past and by the social and material environment within

³ Barad (2003, 815) uses intra-action to describe how phenomena are made in processes of co-constitution—interaction presupposes bounded objects, while intra-action denotes continual co-constitutive remaking of phenomena. Roberts and Sanz (2018) and Niewöhner and Lock (Forthcoming) have used it to describe the entanglement of bodies, scientific processes, and life circumstances.

which it dwells” (Niewöhner 2011, 11-12). Niewöhner proposes “the embedded body” after discussing how the changes in the practices of epigenetic research materialize in the microbiomes of research subjects. All of these authors provide ways to think of bodily states as always in relation with the world around them, both shaped by and shaping local life circumstances, macro-level political and social change, and the norms of scientific knowledge about physiology. Like Lock, their theories shed light on how the diagnostic process is one of many lenses through which we can investigate the entangled intra-actions (Barad 2003) of bodily states, social-political-environmental circumstances, and scientific practices.

To recognize the particular circumstances that shape the diagnostic processes specific to a place and time, it is necessary to attune to the practices that produce a diagnosis. Mol argues that the reality of a disease lies in the fact that it is made through practices (Mol 2002, 4, 12-13). A single disease is made real in many different ways, depending on the practices and tools that bring it into being. Mol uses the term enactment to describe these “doings” of disease. For example, in a clinical setting a patient’s description of pain enacts the reality of a disease, while in a laboratory setting slides, a microscope, and a technician’s trained eye enact disease (Mol 2002, 33-36). Disease “does not stand by itself. It depends on everything and everyone that is active while it is being practiced. This disease is *being done* [emphasis original]” (32-33). In this way, Mol asserts that diseases are always situated within a web of relations that converge to produce them in a certain time and place: “to be is to be related” (54). Adopting a methodological approach that attunes to the enactment of diagnosis facilitates considering how Isabel’s and Mar’s relationships to family members, health care resources, types of clinical expertise, and technologies coalesce to bring about particular kinds of diagnoses.

In Mar's case, for example, access to a public primary care practitioner through her father's stable job, a mother with time to commit to accessing public services, persistent coughs, and environmental conditions of the neighborhood in which she lived coalesced, culminating in a diagnosis of asthma. In Isabel's case, enacting a diagnosis was difficult because her access to medical resources was precarious. Due the complex nature of her delays, technologies that might point to a specific disease mechanism for her cognitive delay did not exist. Without stable formal employment her family could not rely on low cost public health care, and economic insecurity made it unfeasible to sustain private medical attention. The family's economic insecurity and fraught relationships to medical attention made it difficult to acquire a definitive diagnosis for Isabel's delays. Thinking of diagnostic trajectories as enacted through relational practices facilitates understanding how life circumstances and resources produce certain kinds of diagnoses.

Finally, the notion that diagnostic trajectories produce material reality is foundational to my argument that differential access to resources within a healthcare landscape shapes biologies. Charles Rosenberg, a historian who traces the emergence in the 19th and 20th centuries of disease-specific notions of sickness, describes the productive power of diagnosis, even as it claims to objectively identify a single disease. The act of diagnosis not only describes observed health conditions; it also produces decisions and actions, thereby it creates experience "as well as conceptualizes and records it." "The power of disease entities," Rosenberg states, "lies in their ability to structure and legitimate practice patterns, shape institutional decisions, and determine the treatment of particular patients" (Rosenberg 2007, 26). Diagnosis produces, not just describes, reality.

In a related vein, the medical anthropologist and physician Scott Stonington argues that diagnosis is not about accurately describing reality, but rather is fundamentally concerned with generating action. Stonington did not believe certainty about a patient's afflictions to be fundamental to his decision making as a physician in the Cardiac Care Unit of a North American hospital. Instead, the goal of diagnosis in medical practice revolved around "making moves," that is, acting decisively in response to a patient's conditions. Diagnosis does not require *knowing* precisely what is wrong with a patient (Stonington Unpublished manuscript, January 2018), or "pinpointing internal bodily truths" (Lock and Nguyen 2010, 42), but allows a physician to know what to do next (Stonington Unpublished manuscript, January 2018). The purpose of diagnosis and the actions this produces is to generate a physical response—if the discomfort and symptoms of the patient decline, the diagnosis remains useful. If the body responds negatively to treatment, the initial diagnosis should be replaced with another to generate different actions (Stonington Unpublished manuscript, January 2018). Thus, in tentatively naming it, diagnosis shapes the reality of a disease.

Authors Julie Livingston and Alice Street also emphasize how diagnostic practices influence the reality of the disease they seek to name. Livingston shows how the lack of unreliable diagnostic technologies in an oncology clinic in Botswana makes cancer an entirely different disease than the cancers that manifest in well-resourced hospitals of North America (Livingston 2012, 52-53). Street critiques the idea that the goal of diagnosis is discovering exactly what afflicts bodies, arguing instead that medical practice involves acting in response to affliction with the tools available (Street 2014). In her ethnography of a poorly resourced clinic in Papua New Guinea, she notes that "biomedical practices in these hospital spaces do not entail the diagnosis of an underlying disease through the exercise of an authoritative gaze so much as

the development of pragmatic collaborations with medical devices, professionals, patients, and relatives, and experimental “‘tinkering’ with technologies, bodies, and everyday lives in order to create solutions that people can live with” (15). In tinkering for a solution, patients seek out a diagnosis in the hopes that they will gain access to biomedical technologies, medications, and expertise (32). The resources one has to work with in these tinkering affects which diagnoses get made, which in turn affects what sorts of treatments are undertaken, thereby shaping the body and life circumstances of the patient.

These authors show that while diagnosis does not generate definitive knowledge about a patient’s conditions, the ability of diagnosis to mobilize resources produces real, material effects. Uncertainty in knowledge and practical “tinkering” are characteristic of diagnosis in both well-resourced and poorly resourced biomedical settings. The following two case studies of Isabel’s and Mar’s diagnostic trajectories urge us to move beyond questions of whether or not diagnosis produces certainties in knowledge, and ask us to consider instead what diagnoses get made where, and what kinds of practices and bodily effects are produced as a consequence. Mar’s and Isabel’s diagnostic trajectories illuminate how the sorts of diagnoses that are enacted and the resources mobilized as a result, have lasting effects on the bodies of those seeking a response to their health conditions.

Methods

I build my analysis of Isabel’s and Mar’s diagnostic stories from a) my individual organization and analysis of a select portion of ethnographic data collected through the research project *Mexican Exposures: A Bioethnographic Approach to Health and Inequality* (MEXPOS),

directed by my thesis advisor, Dr. Elizabeth Roberts (Liz),⁴ b) my observations from one visit to Colonia Periférico, Mexico City in February 2018 where I met with Mar's family, c) collaborative meetings with fellow students in the Mexican Exposures project lab, d) a consult between Liz, Scott Stonington, and myself to combine medical records about Mar's health conditions with ethnographic data about Mar's life circumstances and practices surrounding her health conditions, and e) review of literature on health care provisioning in Mexico to situate Mar's and Isabel's diagnostic trajectories within the healthcare landscape of Mexico City.

The majority of the ethnographic data I analyze consists of field notes, interviews, and photos that document the time Liz spent with Isabel's or Mar's family in Colonia Periférico, a working class neighborhood of Mexico City. Liz collected this data as a part of, MEXPOS, an on-going project examining the relationship of health, environment, and inequality in Mexico City. MEXPOS works with a longitudinal environmental health study titled *Early Life Exposure in Mexico to Environmental Toxicants* (ELEMENT) to create platforms for bioethnographic research. That is, MEXPOS anthropological researchers collaborate with ELEMENT public health researchers to create a platform that symmetrically combines ethnographic data with environmental and biological data to analyze life circumstances and health in Mexico City (Roberts and Sanz 2018, 749). Alma's and Yaneth's families are two of thousands enrolled in ELEMENT. The study recruited participants as mother-child pairs through public hospitals and clinics in three different cohorts, the first of which began in 1994. ELEMENT has a vast collection of biochemical samples from participants, such as lead levels, urine, and toenails, that researchers use to draw conclusions about the associations of environmental toxicants and health indicators (Roberts and Sanz 2018, 751-752).

⁴ From here forward I will refer to Dr. Roberts as Liz with the intention of reflecting the informal way she interacted with MEXPOS study participants, and the way we interacted.

MEXPOS launched in 2013 with the goal of creating collaborations between environmental, biological, and anthropological data that would generate more comprehensive understandings of life circumstances and health in Mexico City. MEXPOS research consists of intensive ethnographic fieldwork with six families enrolled in ELEMENT, three each from two different working class neighborhoods of Mexico City. The majority of Liz's fieldwork took place from September 2014 to August 2015, with short-term follow up visits from August 2015 to the present. MEXPOS was designed to capture a broad understanding of the life circumstances and histories that shape the health of participant families. The fieldwork paid particular attention to: the health conditions of family members; the kinds of medical attention they seek out and can access; neighborhood and household spatial organization; familial structure and role distributions; economic circumstances; food preparation and eating practices; and the experiences of participants in the ELEMENT study (Roberts and Sanz 2018, 753).

Additionally, the field notes, observations, and photos I collected during a visit to Colonia Periférico in 2018 inform my analysis of Mar's diagnostic trajectory and my understanding of Colonia Periférico. Liz and I met with Mar, Alma, and Raúl (Alma's husband) in their home, during which time I asked Alma follow up questions about Mar's diagnoses, and contextualized my understanding of the neighborhood and household layout, and the distance from their home to nearby pharmacies and IMSS clinics. I was not able to meet with Yaneth and Isabel's family, so my understanding of their diagnostic trajectory is based entirely on my analysis of MEXPOS ethnographic data and Isabel's health records.

Mar's and Isabel's stories stood out within the MEXPOS project as apt cases for exploring how diagnosis and life circumstances interact to produce realities as their mothers faced different challenges in responding to their daughter's complex health conditions. The shift

in Mar's diagnosis from asthma to a cardiac arrhythmia did not unduly concern Alma, but Isabel's lack of a diagnosis generated considerable stress for Yaneth. The two families had different access to economic resources and reliable healthcare coverage. Therefore, Mar's and Isabel's diagnostic trajectories are useful for understanding how diagnoses come to be and what effects they generate, and in consideration of the broader MEXPOS interest in the interactions between bodily states, life circumstances, and neighborhood and family dynamics.

To begin my thesis research, I worked with Liz to identify interesting cases that involved diagnosis. After selecting Mar's and Isabel's stories, I generated a list of all the documents in the MEXPOS project that detail interactions with their families. This process required consulting with Liz for a preliminary list, then doing my own search using Atlas.ti, the qualitative coding software where all of the MEXPOS data is stored and organized according to the date it was collected. I started with an overwhelming amount of data about six families, then, based on my research questions that came to be narrowed to diagnostic trajectories, I created and analyzed a "mini-archive" of the material about two families that would serve my analytical purposes.

After curating the subset of data I would work with, I began the process of reading and analyzing that data, sifting through it for important themes, anecdotes, and biographical details. I used Atlas.ti to read through documents chronologically based on the day the data was collected, taking notes and attaching descriptive and interpretive tags called "codes" to the portions of text that were relevant to my analysis. These codes are analogous to sticky-notes, in that they make important patterns and conceptual themes recognizable and searchable within the large body of data.

The exercise of "coding" the documents is a useful analytical process, not just an organizational method, because it forces the coder to think critically about what concepts surface

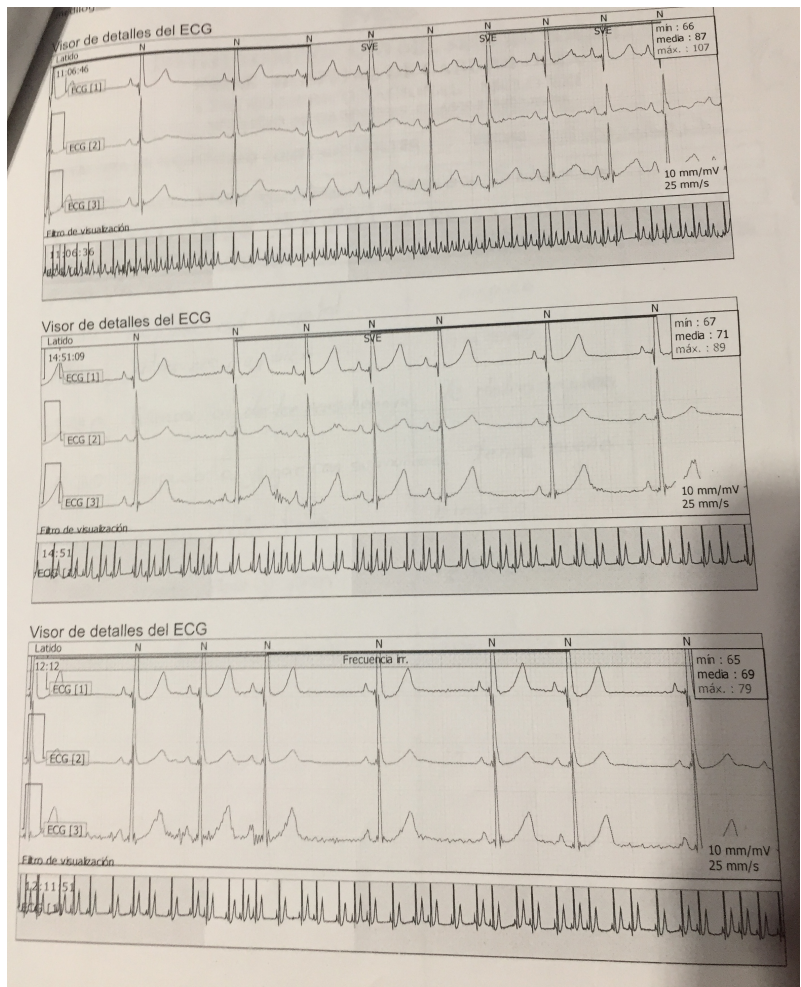
in the conversation that may not be explicitly stated there. For example, a code developed by the larger lab, “ILLNESSES/AFFLICTIONS causality” prompted my awareness of how each mother was explaining their daughter’s health conditions, and allowed me to notice patterns in their explanations in a way that text mining for phrases such as “cause of asthma” would not have. While taking notes and coding the documents, I focused on Mar’s and Isabel’s symptoms, their interactions with biomedical practitioners and institutions, and their mother’s explanations for, reactions to, and ability to act in response to those conditions. In addition to reading field notes and transcribed interviews, I analyzed pictures taken on each day and listened to the audio recording of the transcripts most crucial to my analysis. My observations while analyzing these documents were always in conversation with Liz’s memories of her lived experiences, and with my classmates’ observations about their own research projects.

Throughout this process, I felt as if I “got to know” these two families very well, despite having only met Mar’s family once and never having met Isabel’s. An anecdote from our weekly lab meetings describes the intimacy students of the MEXPOS lab and I feel in working with the data: to clarify a biographical detail about one of the *MEXPOS* participants, Liz turned to one of my undergraduate colleagues and, referring to her focus on field notes involving this participant asked, “Mikaela, you’ve been hanging out with them a lot lately, right? Do you remember?” So, while I previously described the data I work with as an archive, it is important to note that my research process was different from archival research; I spent a lot of time “hanging out” with Mar’s and Isabel’s families, getting to know them through documented conversations, photos, jokes, day-to-day routines, and stories Liz told of her time with them.

In addition to the largely individual process of reading and analyzing the ethnographic data about these two families, my research was also collaborative. Every week, I took a seat

around a narrow table in a small room of the University of Michigan Anthropology department. Crowded around the table alongside me were Liz, the project coordinator of MEXPOS Mary Leighton, and the nine fellow undergraduates who are involved in the MEXPOS undergraduate coding lab. All of us chose topics of interest that appear in the ethnographic data and read the documents relevant to those themes, contextualizing them with outside research. Each week, we gathered to discuss what we coded the previous week, evaluated the descriptive and analytical utility of the codes we were working with, and thought through the significance of concepts or themes that emerged. During these meetings, I bounced ideas off my colleagues, and their insights and related research have been integral to my analytical process. For instance, a classmate's research about a neighborhood pharmacy helped me contextualize the medications Mar was prescribed at nearby pharmacies within broader patterns of what kinds of medications a neighborhood doctor frequently prescribes, and another classmate's research about IMSS medical records helped me better understand the prevalence of Isabel's interactions with medical practitioners compared to other children in the notes.

My research also involved a collaborative bioethnographic endeavor. In order to understand the significance of Mar's diagnostic shift from asthma to a cardiac arrhythmia from a clinical perspective, I consulted Dr. Scott Stonington, a practicing physician and medical anthropology professor at University of Michigan. Together Scott, Liz, and I translated the results from Mar's cardiology diagnostic tests—first from Spanish medical jargon into English medical jargon, and then into English lay terminology—and discussed their significance in relation to what I had observed from the ethnographic data. Understanding what a clinician could have interpreted from Mar's diagnostic story greatly helped me understand how uncertain the process of diagnosis is, both for medical practitioners and as Alma experienced it. It also showed



One page of the results of Mar's Holter test, showing the patterns of her heartbeat. Scott interpreted this data to shed light on the details of Mar's arrhythmia.

me how the slightest change in information relayed by a patient's symptoms, clinical history, or diagnostic tests can change a diagnosis in a way that seems drastic to the untrained eye.

The insights Liz, Scott, and I generated from this collaboration affirmed the utility of one of the MEXPOS project's fundamental goals: bioethnography, or creating ways to combine biological scientific data and ethnographic data in symmetric analyses of how life circumstances, biomedical practices, and physiological processes interact to

shape lived bodily states (Roberts and Sanz 2018; Roberts 2015). Thus, in addition to the collective discussion of ethnographic data happening in the lab, collaboration between data and knowledge of very different fields (medicine and anthropology) was integral to my project.

The screenshot shows the Atlas.ti software interface. The main window displays a transcript of a conversation between Alma (A) and Liz (L). The transcript is on the left, and the right side shows a list of codes and a detailed view of a specific quotation. The quotation is: "A explains how they diagnosed with a cardiac arrhythmia." The codes listed include HEALTH CONDITIONS, HEALTH CARE diagnosis/lack of, HEALTH CARE medical tests, HEALTH CONDITIONS I, ILLNESSES/AFFLICTION ast..., ILLNESSES/AFFLICTION heart, and MEDICATION/TREATMENTS. The status of the quotation is "Created: February 2, 2018" and "Changed: February 2, 2018" by Faith Cole.

A portion of a transcript in Atlas.ti. Here, Alma describes how Mar's diagnosis changed from asthma to a cardiac arrhythmia. Combining this ethnographic data with data from medical reports improved my understanding of the shift in diagnosis.

Finally, another component of my analysis involved reviewing literature about the healthcare landscape of Mexico City. To situate Mar's and Isabel's diagnostic trajectories within an understanding of the healthcare landscape they navigate, I consulted policy and social science publications about the history and organization of the Mexican health care system; the healthcare institutions and providers available in Mexico City; the benefits and disadvantages associated with them; and the prevalence of and institutional capacities to respond to asthma, cardiac arrhythmia, and cognitive delays in Mexico City.

The arguments I present here result from this "hanging out" with MEXPOS ethnographic data, Alma's family, Liz's expertise, my fellow undergraduate coders, and anthropological and policy literature to describe and analyze the diagnostic trajectories of Mar and Isabel. I have organized my analysis in three main sections, using each to zoom in on a different aspect of Mar's and Isabel's stories that reveal how diagnoses and the bodily effects they produce are

shaped by the resources Alma and Yaneth each had access to during their daughter's diagnostic trajectories. In the first section I describe the specifics of each case study and characterize how diagnosis relates to their ability to respond to their daughter's health conditions. In the second section I contextualize each diagnostic story within the healthcare landscape Alma and Yaneth navigate, describing how the kinds of institutions from which they receive attention affect their ability to get a diagnosis, and what kinds of diagnoses they enact as a result. Finally, in the third section I analyze how the resources each mother accessed for their daughter produce material effects, describing how each diagnostic trajectory shaped Mar's and Isabel's bodies and life courses. Through these three sections I argue for theorizing diagnosis not as an objective description of a disease entity, but instead "diagnostic trajectories" as processes of complex looping relationships between bodily states, life circumstances, and political forces in a specific time and place.

Chapter One: Characterizing Trajectories

Mar's Case: From One Certain Diagnosis to Another

Mar is a playful, attention-commanding girl who lives with her older sister, Dany, her mother, Alma, and her father, Raúl, on the top floor of a three-story complex that the family shares with Raúl's extended family. Mar was four years old when Liz conducted the majority of her fieldwork in Colonia Periférico (September 2014 through August 2015), and is eight years old today. When she was one and a half years old, a doctor associated with the Mexican Institute for Social Security (IMSS), the public social security institution that provides healthcare services to formally employed Mexicans, diagnosed Mar with asthma. Alma acted accordingly for years, until, when Mar was seven years old, a doctor at a pharmacy detected an irregular heartbeat and

referred her to the IMSS clinic where a cardiologist diagnosed Mar with what Alma describes as a “cardio-respiratory arrhythmia.” The ways Alma talked about these health conditions, sought medical attention for them, and responded to them constitute Mar’s diagnostic trajectory. This story is characterized, most significantly, by the change in the diagnosis Alma believed best described the cause of Mar’s health conditions: from asthma to a cardiac arrhythmia.

Mar was born significantly premature after just twenty-eight weeks of gestation, via a cesarean section. During Alma’s pregnancy, Mar suffered distress from umbilical cord pressure, but this did not cause any negative physiological consequences and she developed normally. Mar weighed only 1.9 kilos (just over four pounds) at birth. Her frailty as a premature and underweight baby was further complicated by pneumonia, leading her to remain hospitalized for a month before she could go home with Alma and Raúl. She was so weak during this time that her parents chose to baptize her while she was in the hospital, fearing she would not survive long enough to be baptized at the more standard time, a few months after birth. When Mar finally arrived home, Alma began to use filtered water from *garrafoles* (purchased bottles of purified water) instead of boiled tap water, to cook and wash produce for the family’s meals, to more thoroughly avoid contaminants that posed a higher than usual risk to Mar’s weak body. Alma continues this practice today, although she is not as concerned about Mar’s frailty as she was at birth.

When Mar was about two years old, in early 2012, an IMSS doctor diagnosed her with asthma after Alma reported that Mar had repetitive coughs and sometimes difficulties breathing. As Alma recalls, the doctor told her that Mar should avoid using stuffed animals and playing on the carpet, because accumulated dust can irritate asthmatic symptoms. Consequently, the doctor

prescribed an inhaler, which Mar used when she was coughing a lot or having difficulty breathing.

In September of 2014, Mar still had an asthma diagnosis. However, during her first visit with the family, Liz asked if any family members had notable health conditions and Alma did not mention Mar's asthma. Liz did not hear about Mar's asthma until a few visits later, when Mar's coughs prompted Alma to tell Liz that Mar had had an asthma attack a few days previously. According to Alma, cold weather and eating cold food caused the coughing episode. Continuing through 2015, Mar and her family responded to Mar's health conditions partially through her asthma diagnosis, treating persistent or acute coughing fits with an inhaler in addition to cough and cold medications. Liz, too, observed Mar's health conditions through the lens of asthma. Mar's frequent symptoms of cough, cold, and respiratory difficulties were the only trend in the field notes that rivaled in frequency and consistency the descriptions of her playful energy. In field notes, Liz often followed a description of Mar's coughs with a reflection about her asthma, asking herself, for example, whether the cement dust falling from the ceiling exacerbated her condition.

In December 2016 an ordinary visit to the nearby pharmacy began a series of events that would culminate in a shift in Mar's diagnosis. In late December, Alma took Mar to a doctor at a nearby pharmacy hoping to get medications because she suspected Mar had the flu and a throat infection. According to Alma's description of the visit, upon listening to Mar's heart, the pharmacy doctor asked if she had ever been diagnosed with a cardiac arrhythmia, to which Alma

responded, no, no one had ever told her that.⁵ The doctor then suggested she take Mar to her family doctor and ask to get tested for an arrhythmia.

Alma scheduled a visit to the IMSS family clinic, where they referred her to the cardiology unit of the IMSS hospital. On January 3rd, 2017, Mar had an appointment with the IMSS cardiologist to evaluate her heart. An echocardiogram detected a slight, but not grave irregularity in her heartbeat, prompting the cardiologist to refer Mar for a subsequent check-up and a Holter test.⁶ A month later, in early February 2017, the same cardiology unit sent Mar home with six sensor patches stuck to her chest and belly, each attached to a wire that led to a battery-operated device that hung around her neck. The Holter test measured Mar's heart activity for the 24 hours she was instructed to wear it, to detect any irregularities in her heartbeat. Alma kept a log of Mar's activities and symptoms during those 24 hours. The results of the Holter test compared to the log would allow the cardiologist to detect any irregularities in Mar's heartbeat and determine if they correlated with any concerning symptoms, like chest pain.

The records of the Holter results show that isolated premature atrial contractions caused three episodes of tachycardia, but because the heart regulated on its own and Mar didn't show any concerning symptoms, the irregular beats were not worrisome.⁷ The cardiologist determined Mar did not need any treatment, but scheduled a follow-up visit for six months later.

⁵ A cardiac arrhythmia is a term that encompasses multiple irregular heartbeats caused by a malfunction of the heart's electrical system.

⁶ An echocardiogram uses ultrasound technology to make an image of the heart. A Holter test is a portable electrocardiogram device that measures the electrical patterns and rhythms of the heart.

⁷ A premature atrial contraction (PAC) describes an irregular heartbeat that originates in the atria, the upper chambers of the heart. Tachycardia is a term that describes a heart beating faster than its normal rhythm. Mar experienced three episodes of tachycardia in 24 hours, meaning her heart beat abnormally fast three times.

Alma described to Liz how Mar's diagnosis had changed the day after she received the results of the Holter test. As Alma experienced it, Mar's diagnosis had switched from asthma to what she described as a "cardio-respiratory arrhythmia." She understood the diagnosis of an arrhythmia as a negation of Mar's asthma diagnosis, because she believed the cardiac arrhythmia explained the same symptoms (coughs and difficulty breathing), as the asthma previously had. Interestingly, Alma did not appear to be surprised or distressed about the change in her daughter's diagnosis.

Even though Liz asked specifically about Mar's asthma almost immediately during this visit, Alma did not mention the diagnostic shift until an hour later in the conversation. The matter-of-fact tone Alma used when narrating the change did not mirror the confusion apparent in Liz's voice, when she registered surprise in the change of diagnosis. A few days later, when Liz asked again if Mar was doing okay with the new diagnosis, Alma responded, "Oh yeah, she's fine, she seems as crazy as ever." When I asked how Mar was doing when I visited in February 2018, Alma affirmed that she's been doing really well, and that the doctors told her she can continue with life as normal. Alma never once made a comment questioning how the doctors inaccurately diagnosed Mar with asthma, and she never suggested she was anxious for not having detected the arrhythmia sooner. Alma took the change in diagnosis in stride, and didn't display much discomfort with the change in the name given to her daughter's health conditions.

This was puzzling to me, as Liz's reaction to Alma's description of the change, "Oh what a surprise!" seems to suggest it was for her. The story of such an abrupt diagnostic change seemed to raise questions of how the doctors could have been so mistaken about the disease Mar *really* had. Liz and I expected that Mar had only one, real disease and only one, real diagnostic category existed to define it, suggesting we operated with an ontological disease model that

assumes the existence of an “ontologically real and definitionally specific” disease entity (Rosenberg 2007, 15). Because we expected stability in the ontology of Mar’s disease, and expected certainty in the knowledge about that singular disease entity, the change in diagnosis seemed shocking. For us, knowledge about the disease, represented by a diagnosis, seemed fundamental to the experience of the disease.

In an attempt to discern how this mix-up could have happened and curious if there were any circumstances that could make asthma and a cardiac arrhythmia appear similar, I consulted Scott Stonington, hoping his biomedical expertise would improve my ethnographic understanding of Mar’s story. My ignorance of physiology, diagnostic processes, and medical vernacular made it almost impossible for me to know what to look for on the diagnostic documents Alma had shared with me, let alone understand all the acronyms, measurements, and images listed there. Thus, the necessity of Scott’s expertise was immediately clear—the information described on these medical reports was unintelligible without a trained physician to read them. As we translated acronyms and interpreted heart monitor readings, the relationship between technical information and a professional trained to interpret the information made another version of Mar’s disease visible—we enacted (Mol 2002) Mar’s arrhythmia.

At first, the information we discerned from the medical reports only seemed to make Mar’s diagnostic trajectory increasingly unclear compared to what I understood from the ethnographic data. The various enactments of Mar’s disease were not “coordinated,”—they did not hang together under a category that made them appear to be a single disease entity (Mol 2002, 55). On the contrary, the disease enacted by the test results and doctor’s notes seemed entirely uncoordinated with Alma’s experience of Mar’s disease(s). None of the documents mentioned a previous diagnosis of asthma, and did not replace asthma with a new diagnosis of an

arrhythmia. Furthermore, arrhythmia is not a specific diagnosis; it is an umbrella phrase that encompasses a multitude of abnormal heartbeats with various origins and etiologies. The results did show an abnormal heartbeat—specifically, isolated to frequent premature atrial contractions (PACs) departing from her normal sinus rhythm (NSR).⁸ But the occasional abnormal beat was not cause for concern, given that Mar was asymptomatic and her heart returned to a normal rhythm on its own after isolated premature beats.

Although none of the documents mentioned a previous diagnosis of asthma, they did refer to past instances when Mar visited the doctor for respiratory tract infections. In Scott's opinion, non-threatening premature atrial contractions are unlikely to directly cause respiratory difficulties, but the history of coughs and respiratory infections was nonetheless important to the story. Moreover, Scott explained that albuterol, the active ingredient in inhalers like the one Mar was using, can increase the frequency of premature atrial contractions. Therefore, once the IMSS cardiologist detected the PACs in February of 2017, they could have instructed Mar to stop using the albuterol inhaler and come back for a follow-up heart exam in a few months to see if ceasing the albuterol treatment would decrease the frequency of her premature atrial contractions. While the physician did not state that Mar's respiratory difficulties were caused by an arrhythmia, they might have suspected that the inhaler may have been aggravating her irregular heartbeat.

Although the diagnostic tests and doctors notes did not mention asthma, their instructions to stop using albuterol led Alma to conclude that Mar's diagnosis of asthma had been directly replaced by a diagnosis of a cardiac arrhythmia.

⁸ Normal sinus rhythm refers to the heart's normal heartbeat determined by electrical impulses originating in the sinus node located in the upper right atrium of the heart. The NSR is determined by the individual's heartbeat, as sinus rhythms vary from person to person.

Stonington writes about the diagnostic process from the perspective of the physician as one of “suspending disbelief” just enough to make moves that will help the patient. A particular patients’ conditions could be caused by a variety of different diseases, but acting in response to a patient’s health conditions requires data and/or therapeutic trials that “tip the scale” towards one diagnosis. Choosing a diagnosis does not permanently rule out the other diagnostic possibilities. A diagnosis can shift when new data is added to the ever-changing cloud of symptoms and evidence from which doctors base diagnostic and therapeutic decisions (Stonington Unpublished manuscript, January 2018). We will never know if Mar ever “truly” had asthma, but at one and a half years old, we can understand a physician whose patient presented symptoms of lingering coughs and difficulty breathing and who lived in a neighborhood full of asthma irritants, as tentatively diagnosing asthma as an appropriate way to “make moves,” in order to see if an inhaler would relieve her coughs. Since the inhaler seemed to help relieve some of her symptoms, the diagnosis of asthma stuck. That is, until new data in the form of echocardiogram and Holter results suggested Mar’s irregular heartbeat could be exacerbated by the use of albuterol, making asthma a less useful diagnosis.

It appeared that Mar’s diagnosis of asthma had never been certain, even possibly for the doctor who diagnosed her. For a second time, my search for diagnostic certainty, for a precise name to describe Mar’s disease, was futile.

As I poured over field notes and listened to transcripts and reviewed my notes of what I had observed in Mar’s diagnostic trajectory, I started to realize that the certainty I was looking for in Mar’s story was predicated on different terms than Alma’s search for certainty. I was seeking a name that described Mar’s health conditions that would give me some knowledge of what her affliction was. For Alma, however, knowledge of a precise diagnostic category had

never been especially fundamental to the experience of her daughter's health conditions. On Liz's first visit, when she asked if any family members had been diagnosed with health conditions, Alma did not mention asthma. In all the times that Mar was coughing, Alma only once attributed Mar's coughs to asthma, and hesitantly at that, saying that she wasn't sure if her incessant coughs were due to allergies, or the cold, or asthma. Alma much more frequently attributed Mar's coughs to changes in temperature than asthma, suggesting that she operated with a disease model that was more environmental than ontological in character.

Lock and Nguyen (2010) summarize some of the differences social scientists of medicine have noted between ontological and environmental disease models: "A tension has been present from classical times in European medicine between, on the one hand, an 'internalizing' discourse that gives weight to recognition of bodily distress and its medical management and in which disease is decontextualized; and, on the other hand, an 'externalizing' discourse that emphasizes familial, social, political, and environmental contributions to ill health" (43).⁹ Attributing Mar's coughing to asthma and treating it with an inhaler aligns more with an ontological model that presumes the existence of a specific disease within a body and seeks to target it with treatments tailored to the disease mechanism. Alma rarely attributed Mar's coughs to an internal causality of asthma. On the few times she did discuss asthma, it was usually in response to Liz asking specifically about it. She much more frequently attributed Mar's health conditions to environmental conditions. By tracing Mar's coughs to cold temperatures and cold food, and treating those coughs with multiple drugs, and advice to avoid the cold, to avoid eating popsicles and to put on a sweater, Alma aligned more closely with an environmental disease model in which knowing a specific diagnostic category is less crucial to

⁹ See Charles Rosenberg "The Tyranny of the Diagnosis" (2007) for a discussion of the historical emergence of disease-specific models of disease that internalized and decontextualized disease.

explaining and responding to ill-health. Furthermore, despite having received varying diagnoses from multiple different practitioners Alma did not seem confused by the changes in her daughter's diagnostic trajectory. Correctly naming a bodily condition was not Alma's utmost concern.

Although Mar's diagnostic trajectory shifted course, it did display stability and certainty in practice. I began to notice that many of the relationships that allowed Alma to respond to Mar's health conditions when she was diagnosed with asthma also allowed her to respond to Mar's cardiac arrhythmia. Raúl, Alma's husband, remained employed through the entirety of Mar's diagnostic trajectory, a fact which provided enough financial stability that Alma could work from home and dedicate most of her time to caring for the family, and which also allowed Alma to access the diagnostic technologies, treatments, and medical attention available free of charge through IMSS, which is only available to those with formal sector employment. When they didn't have the time or patience to wait in line at IMSS, a low cost private pharmacy was less than five minutes walk away and it provided a steady, affordable stream of medications. The pharmacy prescribed many of the same medications for Mar's coughs and colds when she had a cardiac arrhythmia as they had previously when she had asthma. Consequently, Alma treated Mar's health conditions in much the same way, despite a change in the diagnostic category from asthma to an arrhythmia.

By attuning to the material and social relationships that biomedical practice generates, anthropologists have shown that pharmaceuticals, diagnostic technologies, and health care can all function, beyond their intended uses as forms of assistance necessary to asserting the relations that stabilize life in resource precarious settings (Crandon-Malamud 1991; Roberts 2013; Roberts 2012; Street 2014). Liz's previous ethnography of IVF clinics in Ecuador shows how

reproductive assistance in IVF clinics—in a context of precarious economic and political circumstances where interdependence was a necessary fact of life—was desirable because it served to assert patients’ relationships to privileged forms of medical assistance (Roberts 2013). Street’s ethnography of a low-resourced hospital in Papua New Guinea shows how patients employed a “pragmatic” medical pluralism in which they actively sought to gain access to biomedical technologies, without necessarily adopting biomedical explanations of disease. Patients actively pursued the “relationships the [biomedical] terms evoked and the actions they motivated” (Street 2014, 32). Crandon-Malamud, in her ethnography of medical pluralism in a hierarchically and racially classed village of Bolivia, describes how non-medical motives, like political power and social status, were more powerful than medical efficacy in shaping villagers’ decisions about which medical dialogues to use (1991). Medicine served as a primary resource through which patients could access secondary resources of “social relations and material resources that permit social mobility” (Crandon-Malamud 1991, ix). All of these authors provide evidence that the utility and power of biomedical attention and treatments extends beyond their ability to “pinpoint internal bodily truths” (Lock and Nguyen 2010, 42). Patients and practitioners have used biomedical resources in the settings these authors describe as forms of assistance that can bolster a person’s wellbeing through complex hybrids of physical, social, and political effects. Thus, medical resources must be understood as powerful socio-physical actors in that they assert care for a patient or loved one by generating valued and productive relationships of social and material assistance.

In Mar’s diagnostic story, consistent IMSS coverage, pharmaceuticals, an inhaler, echocardiograms, Holter tests, and appointments with cardiologists all constitute relationships of assistance. Alma was materially asserting her care for Mar and remained confident in her ability

to act in response to her coughs by accessing these resources for her daughter. When I asked Alma if it bothered her that they had been using an inhaler for years to treat what turned out not to be asthma, she responded unperturbed, “No, the inhaler seemed to help.” A diagnosis of asthma mobilized resources on Mar’s behalf. When the pharmacy doctor detected a slight alteration in Mar’s heartbeat, the referral to IMSS cardiologists generated access to check-ups with specialized clinicians, lab tests, and diagnostic technologies. All the while, pharmacies provided a steady source of quick-fix medications to respond to Mar’s coughs and colds.

Alma’s search for a diagnosis was not a search for the certainty of a diagnostic category—it was a search for ways to respond to Mar’s health conditions. Both the diagnosis of asthma and the diagnosis of a cardiac arrhythmia facilitated action on behalf of Mar’s bodily wellbeing. Carrying an inhaler with her while she left the house meant Alma would be able to respond to Mar’s coughing fits promptly, even while they weren’t at home. When Mar was tested for a cardiac arrhythmia, Alma may have been instructed to stop giving Mar doses of albuterol, but her ability to do something in response to Mar’s coughs had not wavered. Alma was still able to acquire prescriptions for Mar’s coughs in the nearby pharmacy, Mar received multiple one-on-one consults with cardiologists, and Alma still had the time to take her daughter to doctor’s appointments as necessary. The only uncertainty in Mar’s diagnostic trajectory was in regards to which diagnosis described Mar’s health conditions, and that shift was not noticeably concerning for Alma because all the other relationships of assistance remained stable.

Even Mar displayed certainty in responding to her health conditions. As Alma treated Mar with doses of cough syrup, decongestants, or antibiotics she received from the pharmacy, she encouraged Mar to keep track of her treatments. At four years old, Mar had already developed attentiveness to her health conditions and how to respond to them. When prompted by

her mother, Mar dutifully held up her fingers to show how many doses of antibiotics she still had to take for her fever. During one of the various instances when Mar played doctor with her sister, Dany, she scribbled a prescription for “*pastillas*” (pills) on Liz’s notebook. Invoking the authority of someone, who, like her mother, is practiced in explaining and treating coughs, she proudly presented Dany with the prescription along with instructions to avoid the cold so as not to exacerbate “*la tos*” (the cough). On another occasion of doctor role-playing, Mar prescribed Vanessa, another MEXPOS researcher, injections and described in detail how to fill the prescription at the pharmacy, including a demonstration of how to pay for them with her pretend debit card. Following in her mother’s lead, Mar was learning from a very young age (four in these anecdotes) the ins and outs of how to get and give medical assistance.

Perhaps the shift in diagnostic certainty did not generate copious anxiety in Alma because the certainty she sought in relation to Mar’s health conditions was less about *knowing* and more about *doing*. Alma’s access to stable healthcare coverage through IMSS and affordable medical attention in pharmacies facilitated her ability to receive a diagnosis for her daughter’s health conditions. In turn, the diagnoses of both asthma and cardiac arrhythmia mobilized resources on Mar’s behalf, ensuring she was attended to. In the process Mar was learning how to reinforce her body’s ability to mitigate coughs, colds, and respiratory problems. For Alma, certainty in these relationships of assistance was more important than certainty in precise knowledge about the physiology of her daughter’s health conditions. Diagnosis was significant in that each one played a key role in securing relationships of assistance.

When I began reading Mar’s and Isabel’s diagnostic trajectories, they interested me because they both displayed what I at the time thought was diagnostic uncertainty—Mar’s diagnosis changed, and Isabel never had one. After analyzing how their trajectories are situated

within the life circumstances of each family and the healthcare landscape of Mexico City, however, I realized that Mar's and Alma's trajectory was not about uncertainty; it was about stable access to healthcare resources facilitating certainty in Alma's ability to respond to her daughter's health conditions. In contrast, as we shall see in the next section, Isabel and Yaneth's diagnostic trajectory, absolutely involves uncertainty. Yaneth is engaged in a similar process of trying to secure relationships of assistance to mitigate the afflictions of her daughter, but her ability to do so is more precarious than Alma's. It is this inability to confidently respond to Isabel's health conditions, entangled with economic instability that made an uncertain diagnostic category so much more problematic for Yaneth than it was for Alma.

Isabel's Case: "Ando como que a ciegas," I Am Walking as If I Were Blind

Isabel is a wide-smiled, quiet tempered, and affectionate girl who lives with her mother Yaneth, her father Carlos, and her younger brother David, on the third floor of their house in Colonia Periférico, which they share with Carlos' extended family. At the beginning of the MEXPOS project in 2014, Isabel was 10 years old, making her 14 years old today. Like Mar's case, Isabel's trajectory displays an uncertain diagnostic category and her mother's search for a way to respond to her health conditions. In this case there is a complete lack of any diagnosis. This lack of a definitive diagnostic category is both partially caused by unstable relationships of assistance (inconsistent affordable healthcare and economic precariousness) and exacerbates unstable relationships of assistance (inability to access resources to respond to Isabel's conditions).

Isabel has a mysterious cognitive delay that has never been diagnosed. Yaneth, her mother, is on a quest for diagnosis as a way to access resources for her daughter. Like Alma,

Yaneth wants to secure relationships of assistance that will help her respond to her daughter's health conditions and stabilize her bodily security. However, due to the complex character of Isabel's health condition and the precarious economic circumstances of her family, the kinds of resources Yaneth must access to address Isabel's delays and her ability to do so, are much different than those Alma employs to address Mar's respiratory problems.

Navigating the healthcare landscape in response to Isabel's health conditions was very difficult for Yaneth. Without consistent health insurance coverage, it was difficult to acquire a diagnosis for Isabel, and with low wages from unstable working-class jobs it was financially unfeasible for the family to sustain long-term therapy with private practitioners. Without a diagnosis, it was difficult for her to demonstrate to special education programs in the public schools that Isabel needed academic and social support:

Soo... yeah, I went to make copies [of Isabel's medical history reports] because they are, they say there is support from... from... USAER, yeah, USAER is a, a support teacher in the primary schools...they told me... I tell them that she has always been having a... well... that is, when she was born... I don't know how to explain it... I don't think the oxygen arrived to her brain well or something like that so she has what they call a disability, a disability as far as the... you see, something like motor skills, or sometimes they call it a language disability when they can't speak well. So they sent me to bring her to that school because the director told me that if I could get a file together of all the places I have brought Isabel... where I have brought her for an appointment... umm... they could maybe in this next semester, they could maybe see if there is a way to get her some support for... uhh... for example math is really difficult for her... and her hand, I think it is her left hand, she can't bend it well. It stays sort of like this you see, but I barely even noticed until recently when I was taking her to psychomotor appointments... so... um... Because we've never really, we've never really figured out what it is exactly that she has, but, for example, they've done all kinds of tests on her. They did one at three years old, then six years old, I mean, we've done everything. We went to language therapy, and then she wasn't learning well so I took her on my own bill to casa de árbol [a learning center] over here and they did a diagnostic test and she went there a few times a week. And then we went to a different psychologist so they could do some tests...

-Yaneth, November 13th, 2014.

The disorganization and non-linearity of Yaneth's explanation of Isabel's cognitive delay reflects the directionlessness she faces in responding to her daughter's health conditions. Without a

diagnosis to help explain Isabel's vague disability, Yaneth experiences Isabel's cognitive delay as a murky cloud of ill-defined symptoms, odd behaviors, unique personality traits, and conflicting opinions from diverse medical practitioners; all entangled with economic instability and difficulty acquiring resources for her daughter. The uncertainty Yaneth experiences in responding to her daughter's health conditions is in direct tension with her certainty that Isabel will need social support if she is going to be physically safe in the future.

Isabel's cognitive delay poses a threat to her wellbeing that is not intuitively corporeal, but nonetheless presents serious physical danger. One of the ways in which Isabel's cognitive delay manifests is a lack of awareness about social relationships. She often mistakes strangers or acquaintances for family members, she waves energetically and smiles widely to people on the street, and she often makes comments that would be considered tactless coming from the mouth of a "normal" child. As Isabel's body nears puberty, her female figure will make her potentially a target of gendered violence. With this worry on her mind, Yaneth hoped to access special education or therapy that would allow Isabel to learn social skills to fend for herself in high school and while walking in the neighborhood.

Isabel's cognitive delays that increasingly worried Yaneth in 2014 were not apparent immediately. She was born premature in the nearby IMSS clinic. Yaneth gave birth via cesarean section following many hours of unsuccessful labor. A complication during this long labor resulted in what Yaneth describes as "a lack of oxygen" to Isabel's brain. Because she was premature she was kept in the hospital in an incubator for seven days. Other than symptoms of acid reflux in the first few weeks after going home, Isabel seemed like a healthy baby. At this young age, Yaneth had not noted any signs of developmental delays.

When Isabel was an infant, her aunt and grandmother cared for her at home because Yaneth was working part-time as a secretary. When Yaneth found that Isabel was becoming fussy, she worried her daughter was becoming too dependent on her doting aunt, so she decided to enroll her in a *guardería* (day care). Yaneth did not doubt her daughter's intelligence until, when Isabel was about two years old, supervisors at the *guardería* urged her to get Isabel tested for a disability. They were worried, they explained, because Isabel's motor skills and speech abilities were under developed for what was expected at her age. She heeded their advice and consulted Isabel's pediatrician. Unconvinced, the pediatrician told Yaneth to ignore such negative comments, assuring her that although Isabel lacked oxygen at birth, she was just a slow learner and would soon adjust. From the point that the *guardería* first expressed concern about Isabel's learning abilities, however, her delays became increasingly apparent to Yaneth. Isabel continued to be fussy, she struggled in elementary school with math and reading, she mistook non-relatives for aunts or uncles, she never made close friends, and she had a hard time paying attention and was always fidgety.

Upon noting these irregularities, many people including medical specialists, educators, ELEMENT researchers, and extended family members expressed concern about Isabel's abilities, urging Yaneth to get help for her. An aunt of Yaneth's remarked, "Yaneth, your daughter is not right, you need to buy her medications." A particularly insensitive psychologist provoked a furious response from Carlos when she suggested to the couple that they stop paying for therapies because, "at the end of the day she's never going to get ahead... sooner or later she will end up a vegetable." Years later in 2015, after seeing that Isabel scored very poorly on a test meant to measure study participants' attention spans, ELEMENT researchers pulled Liz's

research assistant, Vanessa, aside to ask if Isabel had ever been diagnosed with a disability, implying that her mother should do more to seek out special education programs for her.

But, Yaneth had in fact been engaged in a ceaseless search for diagnosis since the *guardería* first noted Isabel's delay, to access support that would help improve Isabel's ability to learn and socialize. Yaneth had taken her to see a patchwork of practitioners in the private and public sectors including psychomotor specialists, speech therapists, neurologists, and psychologists. These practitioners used tactics as diverse as motor skill development, speech therapy, and psychoanalysis to try to improve Isabel's learning abilities and social awareness. The family moved in and out of IMSS coverage (social security insurance that provides health care to formal sector employees) because Carlos fluctuated in and out of formal employment. Without consistent IMSS care, Yaneth looked to private practitioners to address Isabel's needs. But with unstable working class wages, Yaneth and Carlos were forced to borrow money from family members or scrape together savings to pay for private care. Yaneth decided to discontinue therapy on multiple occasions because they could no longer afford the expense.

One place from which Yaneth may have been able to access consistent, affordable assistance for Isabel was through special education programs in the public schools distributed through the USAER program she mentioned in the conversation quoted above. A student aid and curriculum customized to the student's needs are free to those enrolled in the program, but enrollment is not guaranteed for all students with learning difficulties. Because the program's resources are limited, the evaluation protocols prioritize children who demonstrate a clear necessity for support (García-Cedillo, Romero-Contreras, and Fletcher 2014). Therefore, although USAER policy does not require a diagnosis of learning disability, it is easier for a parent to enroll their child in the program if they can present a documented diagnosis.

Unfortunately, although many have pointed out that “something just isn’t right” with Isabel, she has never received a clear diagnosis. In search of a diagnosis, Isabel has been evaluated by her private pediatrician, by multiple public and private psychologists who gave her IQ tests and psychometric tests, by an IMSS neurologist, and by a private geneticist. Despite this effort and expense—the quest for a diagnosis—Isabel’s health conditions remain vaguely defined as “learning disabilities” or “cognitive delay,” inhibiting her ability to enroll in USAER programs that provide support within the classroom.

The pressure Yaneth felt to address Isabel’s conditions grew as Isabel approached adolescence. When Isabel was thirteen years old in 2017 Yaneth was increasingly anxious about the threat Isabel’s social impairments posed to her bodily safety. The need to enroll her in a special education program was urgent, as she needed to do well in primary school to advance to high school. But more importantly, Yaneth needed Isabel to learn how to stand up for herself and navigate her social world when Yaneth was not around to help her. Her tendency to make odd comments would make her an easy target for bullies, and she didn’t have any friends that would stick up for her. Most concerning, however, was that Isabel had never learned to be hesitant towards strangers; she was friendly with everyone she met. On one occasion in 2014, Isabel climbed into the wrong vehicle after a family wedding, following other kids her age on board and happily chatting with them as her family frantically looked for her back at the event. Briefly losing Isabel like that was extremely worrisome for Yaneth because, as she explained, “She is very confident and because of that I worry when... I get really anxious every time I lose sight of her! My personality is very much don’t laugh with them, no don’t chat with those people...but she for example thinks, oh this is my *tío*, this is my family, and she goes and talks to everyone.” In Yaneth’s opinion, Isabel’s innocent friendliness and welcoming grin that had previously

seemed charming, started to become a threat as Isabel's body matured, making her vulnerable to men on the street as she was less aware of, and therefore less able to mitigate the physical threat posed by the sexualization of her female body. Her future ability to protect her body from sexual violence relied on her capacity to navigate her neighborhood with the awareness necessary to avoid predatory men on the street.

Many feminist geographers and sociologists have documented how urban spaces are not gender neutral—men have greater access to and more power in public urban spaces than women do and the perceived intrusion of women into masculine spaces is often met with sexual violence ranging from friendly to insulting verbal comments, physical assault, rape, and disappearance (Valentine 1989; England 1991; Dunckel Graglia 2016; Montoya Ruiz 2013; Flores Pérez 2014; Gaytan Sánchez 2007). Mexico City is no exception. A report based on surveys of women and girls who use public transportation in Mexico City documents 9 out of 10 women who were surveyed reported having experienced some type of sexual violence during their lifetime (Zermeño Núñez and Plácido Ríos 2010, 13). Another report, published by the National Institute for Women of Mexico City (INMUJERES), notes that many of the women interviewed for the study described sexual harassment and assault as an inevitable fact of navigating public space in the city: “it’s something you have to live with” (Colegio de México 2015, 83).

In addition to these reports, authors such as Gaytan Sánchez (2007), Dunckel Graglia (2016), and Flores Pérez (2014) further document how women experience and respond to sexual assault in their everyday lives navigating Mexico City. These authors describe women's apprehension about using public transportation, fear of walking alone especially at night, and the strategies women adopt to avoid or respond to instances of sexual assault. All three authors note that women develop and actively employ a generalized distrust towards unknown men in public.

Dunckel Graglia (2016) describes how women practiced “non confrontational behavior” both before specific instances of assault to avoid harassment and after receiving comments from men on the street (634). Gaytan Sánchez and Flores Pérez both narrate their informants’ feelings of insecurity and generalized distrust towards unknown men while they walked in public (Gaytan Sánchez 2007, 15; Flores Pérez 2014, 70). The INMUJERES report notes that women become less social in order to avoid sexual assault; women limit who they talk to, glance at, or smile at on the street for fear of drawing too much masculine attention to themselves (Colegio de México 2015, 83). These works all suggest that a learned apprehension towards unknown men in public spaces is navigational capital vital to women’s safety as they move through gendered public spaces in Mexico City.

Yaneth’s worries then about Isabel’s safety in light of her trusting nature were not unfounded. When she discussed her desire for Isabel to be *auto-suficiente* (self sufficient) despite her health conditions, she did not express concern about Isabel getting a job, living independently after high school, or becoming a successful career woman. Rather, Yaneth’s definition of self-sufficiency reflected her immediate concern that her daughter be able to navigate the streets of the neighborhood on her own:

“No, I don’t like her to run errands by herself. I’m not a big fan of sending her... If I tell David to go get bread and she volunteers I let her go, but you know how on this corner there are always a lot of men, drug addicts? Because of that I don’t like to send her, because she is very confident...”

-Yaneth, March 7th, 2017.

Life in Colonia Periférico is very socially dense—families live in multi-unit compounds shared with extended family who have lived in the neighborhood for generations, *puestos* (informal vendor stalls) block the sidewalks selling tamales and fruit salads, families hold birthday parties with bouncy tents spilling into the street, mothers chat daily when they ride in

the *combi* (a communal taxi) to pick their children up from school, and men congregate in groups on the sidewalks. The dense *knowingness* between neighbors in the Colonia provides a supportive social fabric that strengthens the community's ability to mitigate police violence, economic instability, and intruding public health workers (Roberts 2017). In some ways, Isabel is safer in this neighborhood filled with familiar faces than she may be in neighborhoods where she is less known and cared for. Nevertheless, for a woman to safely navigate public spaces where groups of men congregate requires she possess an awareness of when a man's friendliness turns from benign to disquieting.

In this way, gender relations played a fundamental role in enacting (Mol 2002) the experience of Isabel's health conditions and the urgency Yaneth felt to respond to them. If Yaneth did not have to worry about the threats men on the street pose, Isabel's unrestricted friendliness and her inability to comprehend the threats of masculinity would not be so problematic or pathological. Isabel's confident personality and her lack of socialization into feminine wariness around men on the street became dangerous as her body developed but her awareness of gender hierarchies in public spaces did not. Isabel's ability to secure bodily safety in the future hinged on her having the social awareness to be cautious around men on the street.

Yaneth's worry about her daughter's health conditions was similar to Alma's in that she sought to fortify Isabel's physical wellbeing through accessing relationships of assistance. But her ability to do so depended on different sorts of relationships than the ones Alma sought out to mitigate Mar's coughs. Namely, Yaneth urgently needed support that would help teach Isabel the social skills necessary for her to be *auto suficiente*. That is, resources that would improve her competency in school, but more crucially, that would help her learn the social skills necessary to protect herself. The only affordable place to access educational and social support was through

the schools, and that was more difficult without a clear diagnosis. Thus, Yaneth's search for the future security of Isabel involved a search for a diagnosis, in the hopes that it would facilitate access to affordable resources in Isabel's high school that would work with her on social and academic skills.

The diagnostic trajectories of both Mar and Isabel involve mothers seeking to act in response to their daughter's health conditions. Further, both reveal the utility of diagnosis for accessing relationships of assistance. For Alma the change in diagnosis was not as significant as the fact that each diagnosis mobilized resources on Mar's behalf to respond to her respiratory difficulties. For Yaneth, a search for diagnosis was valuable in that a definitive diagnosis had the potential to facilitate receiving affordable educational and social support for Isabel.

Now that we have characterized each story as a mother's search for relationships of assistance that would fortify the physical wellbeing of her daughter, and previewed the kinds of resources that are necessary for each mother to do so, I turn to an analysis of how each diagnostic trajectory played out in the healthcare landscape they navigated. Each mother confronts different difficulties in responding to her daughter's health conditions, which raises questions about how the resources that coalesce to enact a particular diagnosis affect the body of the person who is diagnosed.

Chapter Two: Diagnostic Trajectories in the Healthcare Landscape of Mexico City

Many social scientists of medicine have documented how disease does not exist outside the social, political, and economic contexts within which it manifests (Lock and Kaufert 2001; Lock 1993; Niewöhner and Lock Forthcoming). Specific manifestations of disease are situated in

histories and processes that position bodies in specific places and time. It follows that, if diseases are situated, so too is the process of naming them: diagnosis is situated. Attending to the practices involved in enacting a disease, as Mol urges researchers to do (Mol 2002), reveals how the relationships of assistance one has access to in their diagnostic trajectory influence the kinds of diagnoses that are produced. In the following section, I discuss how the economic circumstances of each family and the kinds of resources they each have access to act on Mar's and Isabel's diagnostic trajectories by enacting particular diagnoses.

Isabel and Mar both live in Colonia Periférico, a working class neighborhood in the southwest of Mexico City.¹⁰ Both Yaneth and Alma work at home selling cosmetics and home goods through direct-sales catalogues. Their sales allow them to contribute to the family income while still dedicating much of their time to caring for their family. Their domestic labor is a full time job: Alma and Yaneth take on most of the responsibility for shopping, preparing meals, cleaning the house, taking their children to and from school and doctors appointments, and keeping track of the family's finances and medical records. Both mothers have high aspirations for their children and do all they can to invest in their health and education. Alma sought out and enrolled her two daughters in state-sponsored scholarship and extracurricular programs, resourcefully capitalized on ELEMENT data collection appointments to seek medical advice from the researchers involved in the project, and diligently kept track of every family members' medical records from IMSS, ready to bring them to appointments and explain their medical history whenever they saw a new practitioner. Yaneth too, is an expert resource seeker. She desperately wanted Isabel and David, her younger son, to learn English, she enrolled her children

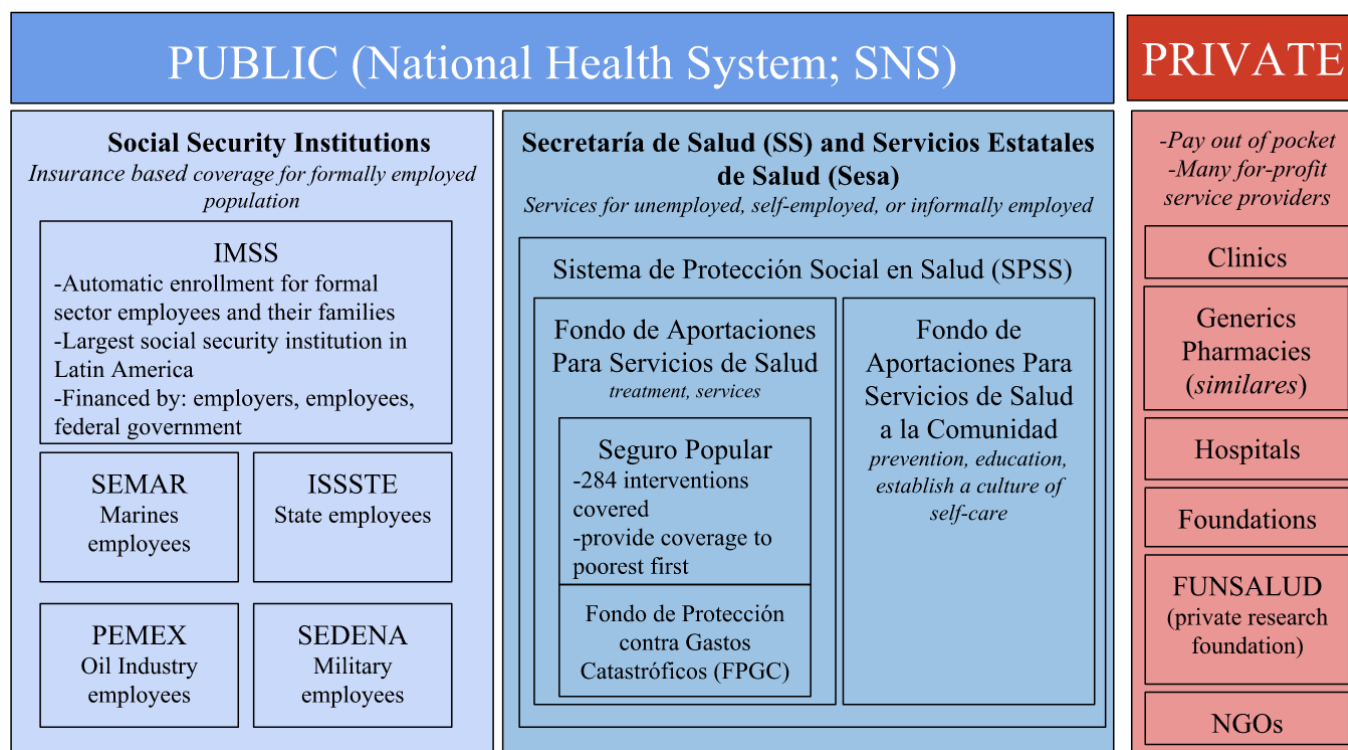
¹⁰ For an interesting discussion of the unique geographic characteristics and social fabric of Colonia Periférico see "What Gets Inside: Violent Entanglements and Toxic Boundaries in Mexico City" (Roberts 2017).

in private *guardería* (day care) when they were infants, hoping they would get a head start in learning to read, she also consulted ELEMENT researchers about Isabel's health conditions, she has been searching for special education programs for Isabel since she was very young, and she declared she would do whatever it takes to find the money for private healthcare if it meant David and Isabel would be better attended to.

Much of the time Yaneth and Alma spent seeking resources for their children was devoted to navigating the complex healthcare landscape of Mexico City to respond to Mar's and Isabel's health conditions. The types of services each had access to shaped the kinds of diagnoses their daughters received.

The Mexican healthcare system is made up of public clinics and hospitals administered by social security institutions that coexist with private clinics and hospitals, and private low-cost pharmacies that specialize in the sale of generic medications and provide a consultation with a clinician on site for a very low cost. Each of these broad categories contains within it heterogeneous types and qualities of providers.

An overview of the Mexican healthcare landscape. Made by the author with the information presented in Dávila Torres, Rodríguez Díaz Ponce, and Echevarría Zuno (2012).



The public sector of healthcare services, which are all funded in part by the national and state governments, is divided into two administrative subcategories: those overseen by social security institutions, and those directed by the Secretary of Health (SS) and State Secretaries of Health (SESA). The first category provides healthcare services to formally employed Mexicans and their families via social security institutions that administer insurance schemes and provide healthcare services (Dávila Torres, Rodríguez Díaz Ponce, and Echevarría Zuno 2012, 20). There are multiple social security institutions, each of which own and operate its own network of hospitals and clinics, and have their own administrative body, beneficiary population, funding scheme, and menu of included social services (Dávila Torres, Rodríguez Díaz Ponce, and Echevarría Zuno 2012, 20, 27-34). The Instituto Mexicano de Seguro Social (IMSS), is the largest of these institutions. IMSS provides care to those with private formal sector work.¹¹ ELEMENT recruited all of its participants, including Alma and Yaneth, through IMSS obstetrics clinics when they were pregnant, and therefore all ELEMENT mothers had IMSS healthcare insurance while they were pregnant with at least one of their children. Alma has had IMSS consistently since she was recruited by ELEMENT, but Yaneth's family has moved in and out of IMSS coverage as her husband fluctuated in and out of formal work.

The second branch of public healthcare, managed by the SS, is made up of the programs that provide services to unemployed or informally employed citizens (Dávila Torres, Rodríguez

¹¹ The other social security institutions provide services to public sector employees: ISSSTE serves state employees, PEMEX serves employees of the oil industry, SESMAR serves members of the marines, and SEDENA serves military employees. The Mexican health system has been critiqued for inefficiencies and inequities in resource distribution due to the vertical organization and fragmented structure of this public system of social security institutions (OECD 2016; González Anaya and García Cuéllar). Various commentators have suggested reforms to better improve resource sharing and coordination between the various social security institutions (OECD 2016; González Anaya and García Cuéllar; Dávila Torres, Rodríguez Díaz Ponce, and Echevarría Zuno 2012).

Díaz Ponce, and Echevarría Zuno 2012, 20). Most notably, this sector of the health system includes *Seguro Popular* (SP), a program implemented in 2006 that offers voluntary insurance to Mexicans without formal employment (Frenk et al. 2006). The Minister of Health designed Seguro Popular in an effort to work towards the right to universal health coverage guaranteed by the 1983 Mexican Constitution (Dávila Torres, Rodríguez Díaz Ponce, and Echevarría Zuno 2012, 34). However, *Seguro Popular's* success has been questionable. For families such as Yaneth's, SP may not be a viable healthcare option because the design of the program requires all but the very poorest of Mexicans to co-pay for insurance that only covers a very limited list of primary services.

Even though Mexico has not realized its constitutional guarantee of universal health coverage and the system has been critiqued for inequities and inefficiencies in resource distribution, the healthcare system is comprehensive relative to that of the United States. The past few decades of neoliberal reforms have arguably had a negative impact on the strength of the healthcare system (Homedes and Ugalde 2009; Laurell 2007; Leal Fernández 2013), but it nonetheless retains some of the legacy of a paternalistic post-revolution government that sought to provide a comprehensive definition of wellbeing for its citizens. The social security institutions with their origins in the 1917 constitution offer a wide variety of services that extend beyond healthcare to childcare, recreational centers, and other benefit programs (OECD 2016, 53).

A great number of private healthcare providers coexist with the system of public institutions. A very small percentage of Mexico's population opts to buy private insurance (OECD 2016, 62-63). However, out of pocket health expenditures are high compared to other OECD countries (OECD 2016, 61), demonstrating that private services occupy significant space

in the healthcare landscape.¹² The category of private health care providers must be further broken down into a group made up of heterogeneous private clinical practitioners and hospitals, and a category of for-profit private pharmacies. The former are expensive and primarily used by affluent Mexicans (OECD 2016, 62), while the latter target working-class populations (Hayden 2007, 484-486), offering a consult with a licensed doctor, a prescription, and medications on-site for a very low price. Both Alma and Yaneth use private pharmacies when they are seeking an efficient way to respond to minor afflictions. Alma very rarely seeks care from non-pharmacy private clinicians, whereas Yaneth stretches her economic resources in order to access private practitioners outside of pharmacies. In the following sections I will elaborate on the specific characteristics of each of the sectors of the healthcare landscape with which Alma and Yaneth engage, and will analyze how the resources available through each of these sectors influence the diagnostic trajectories of Mar and Isabel.

Seguro Social (IMSS)

Alma and Yaneth seek out IMSS services to varying degrees throughout their daughter's diagnostic trajectories. Alma has consistent access to its healthcare free of cost, while Yaneth fluctuates in and out of coverage. When they do have IMSS insurance, both complain about inefficiencies in care provision, but Yaneth's trust in IMSS medical attention is notably lower than Alma's.

¹² The Organization for Economic Cooperation and Development (OECD) is an intergovernmental body that was founded in 1960 dedicated to stimulating economic development and trade. Today it consists of 35 member countries who, among other things, cooperate to collect and share data about the development of the member countries. The OECD publishes public reports like the one cited here to assess and compare member country's development in various areas, including health indicators and data about healthcare systems.

Seguro Social, as Alma and Yaneth refer to it, is the largest health insurance and social protection institution in all of Latin America (Dávila Torres, Rodríguez Díaz Ponce, and Echevarría Zuno 2012, 30; González Anaya and García Cuéllar 2015, 190). Its legal origins date back to the post-revolution mandate established by the 1917 constitution that employers take responsibility for their employees' healthcare (Dávila Torres, Rodríguez Díaz Ponce, and Echevarría Zuno 2012, 30). Since then, the national government has reformed, reorganized, and renamed the strategies for carrying out that legal mandate many times. In 1943, IMSS was founded in an effort to carry out the promise for employment based social security established in 1917 (30). In 1995, the Social Security Law defined the objectives of social security, making social security institutions responsible for their employees' rights to health, medical assistance, the protection of their means of subsistence, access to the social services necessary for individual and collective wellbeing, and a retirement pension (IMSS 2016).

Any individual with formal, private-sector work is automatically enrolled in the IMSS insurance scheme (OECD 2016, 55), which is funded by contributions from employers, employees, and the federal government. Once enrolled, employees and their family members are eligible to receive services from the various providers owned and operated by the organization. IMSS services include medical providers, day care centers, and cultural and sports facilities, among others (González Anaya and García Cuéllar 2015, 190). Primary, secondary, and tertiary healthcare is available in IMSS hospitals and clinics. In Mexico City, IMSS operates 44 clinics and 37 hospitals (IMSS 2017a).

The automatic enrollment and comprehensive benefits of IMSS results in a fairly expansive social safety net for the institution's beneficiaries, of which there are many. In 2015, IMSS insured 17.6 million workers. Once workers' family members are included, that statistic

translates to upwards of 59 million recipients, just under half of Mexico's population for that year (González Anaya and García Cuéllar 2015, 192). *Seguro Social* provides a substantial range of healthcare and social benefits to a large population of Mexicans employed formally in the private sector and their families.

Alma's family benefits from the affordable healthcare and social services that IMSS offers. Raúl has formal, private sector employment with a company that installs security systems. His job stability gives the family continuous health care coverage *Seguro Social*. Continuous coverage provides Alma and Raúl's family basic primary care, specialized diagnostic tests, and comprehensive treatments free of charge. Although Alma sometimes opts out of using IMSS services because they are less convenient than pharmacies, she is comfortable in her ability to access diagnostic tests and treatment for health problems that require more than a simple prescription. IMSS services play a key role in Mar's diagnosis of both asthma and a cardiac arrhythmia.

Yaneth's family is not as fortunate as Alma's in their access to IMSS healthcare. Because insurance is tied directly to employment status, workers and their families lose coverage soon after they lose formal work. Isabel's father Carlos moves frequently between formal and informal work, as many Mexican workers do (OECD 2016, 46), and Yaneth's direct sales work, because it is informal, does not qualify for IMSS coverage. In October 2014 Carlos was formally employed at a store that sold eyewear. This job gave their family access to IMSS insurance. He was also supplementing this income with a newspaper delivery job, getting up very early every morning to finish his route before going to work a full day at the eyewear store. In December of 2014 Carlos lost the job in the store, and consequently the family lost access to free IMSS health. The income from delivering newspapers was insufficient to support the family. The resulting

economic stress prompted Yaneth to look for work outside the home. Her search for formal employment was unsuccessful, forcing her to dedicate more hours to direct sales to pay the bills. Neither Yaneth nor Carlos had formal employment for almost two full years, during which time they could not access healthcare services through IMSS. The family remained financially stressed and lacked IMSS coverage until March of 2017, when Carlos found formal work with AT&T. Consequently, the precariousness of healthcare that families face as a result of unstable formal employment shaped Isabel's diagnostic trajectory, because her family's IMSS eligible employment was transient.

For those that do have IMSS coverage, it is a valuable source of medical attention. Reports suggest that the insured population is fairly satisfied with the medical services IMSS provides. The National Survey of User Satisfaction of Medical Services (ENSAT), a survey administered by IMSS twice annually to gauge users' evaluations of their service provision, reports that satisfaction rates with IMSS services in Mexico City has increased since 2014 (IMSS 2017b). In October 2014, 66% of insured recipients in the south of Mexico City reported they were "satisfied or very satisfied" with IMSS medical attention (IMSS 2017b). In July of 2016, that number increased to 75% of users (IMSS 2017b). The November 2017 survey reported that 85% of users in the south of Mexico City were satisfied or very satisfied with IMSS care (IMSS 2017b). The high levels of vaccination coverage among IMSS beneficiaries (96%) also suggest that IMSS is, by some measures, a successful provider of primary health care services (González Anaya and García Cuéllar 2015, 190).

Indeed, Alma relied heavily on *Seguro Social* both when Mar was diagnosed with asthma and with a cardiac arrhythmia. It was an IMSS practitioner who diagnosed Mar with asthma in 2012, and subsequently prescribed her an inhaler and instructed her to avoid irritants.

The change in Mar's diagnosis also came about as a result of Alma's ability to access IMSS services. Between December 2016 when a pharmacy doctor detected an irregular heart beat and December 2017 when she had her most recent visit to the cardiologist, Mar had five consults in an IMSS clinic or hospital, was attended to by four different specialists, and was examined by four different diagnostic technologies, all without accruing any financial burden. The consistency of expertise and technologies Mar and Alma received in IMSS was unavailable in pharmacies and would have been expensive in private healthcare facilities. Thanks to consistent *Seguro Social* coverage Alma seems just as confident in her ability to access care for her daughter's cardiac arrhythmia as she was when Mar had asthma.

Although IMSS proved very helpful to Alma in Mar's diagnostic story, the public clinics are not without their faults. Many policy makers and academics have critiqued IMSS ability to deliver high-quality services to its large population of users. The organization has long been notorious for lengthy wait times, both for walk-in and scheduled primary care, and for scheduled surgical procedures.¹³ The 2016 National Survey of Health and Nutrition (ENSANUT) reported that the average wait time for patients who have previously been diagnosed with diabetes, hypertension, or high cholesterol was 70 minutes (Secretaría de Salud 2016).¹⁴ Wait times at

¹³ For example, an article published in 2002 by the newspaper, *El Norte*, writes, "Still today, the only thing *seguro* (sure) about *Seguro Social* (IMSS) is its extremely tortoise-speed service" (Ramos et al. 2002). In 2016, another newspaper, *Reforma*, reported that wait times in IMSS have increased over the past four years, according to the results of the National Survey of Health and Nutrition (ENSANUT) (Vitela 2016).

¹⁴ ENSANUT is a survey administered by the Instituto Nacional de Salud Pública (INSP; National Institute of Public Health) and the Secretaría de Salud. In 2016 the survey was sent to individuals in approximately 9,500 randomly selected households with proportional representation of regional populations. The focus areas of the survey included: the prevalence of chronic health conditions, focusing mostly on diseases like diabetes, hypertension, and high cholesterol; the quality of treatment of patients previously diagnosed with diabetes, hypertension, and high cholesterol; living conditions; social security coverage; physical activity and diet; and awareness of the public health campaign *Chécate, Mídete, Muévate* (Secretaría de Salud 2016).

other public social security institutions were comparable to those at IMSS, while wait times at private clinics and doctor's offices affiliated with private pharmacies were significantly lower, with average wait times of about 30 minutes (Secretaría de Salud 2016).

Indeed, the long wait times at IMSS medical facilities affect the decisions Alma and Yaneth make about where to seek care. On various occasions, Alma chose to go to a private clinician affiliated with a pharmacy instead of IMSS because of the long wait times at the nearby clinic. In February 2017, when Liz asked Alma why she chose to take Mar to a pharmacy to get medications for her cough, she replied “Yeah, because it’s a huge pain to go and lose all that time in *Seguro* [IMSS].” In November 2014, a month before the family lost coverage, Yaneth expressed a similar attitude towards IMSS. When Liz inquired why she chose to go to a pharmacy instead of IMSS clinics when her children get sick, Yaneth replied:

Because you lose a lot of time in IMSS. Because if you go and you don't have an appointment you have to get in line, or even if you do, you have to be there, even if you do have an appointment. If I don't feel well, and I go there at twelve, and I leave at six, well that's a good day! Imagine it, you feel bad, and you have to go and get in line, and wait all that time. I mean, if they're going to give you paracetamol [Tylenol] and ambroxol [a decongestant], I can get those here [at the pharmacy].

-Yaneth, November 10th, 2014.

Both Alma and Yaneth express annoyance with IMSS long wait times. Yaneth's distrust of the institution, however—which is notably greater than Alma's, even when Yaneth is insured—is based on much more than the inconvenience of long lines. When explaining Isabel's cognitive delays, Yaneth holds the dysfunction of the IMSS clinic where she gave birth responsible for the complications that led to Isabel's delay. Consequently, even when the family

Because the survey did not ask about the quality of services for all patient populations, but rather focused on the quality of care for patients with previous diagnoses of diabetes, hypertension, and high cholesterol, I am using the measures of wait times for those patients as a proxy measure for wait times in general.

does have IMSS coverage, Yaneth distrusts the clinics and does what she can to avoid using them.

When describing the history of Isabel's cognitive delay, Yaneth often began her narrative with Isabel's birth story. As she explained it, Isabel's delays were entirely unanticipated. She believed Isabel should have been born a healthy baby, due to the fact that she and Carlos planned to get pregnant. They had been married for a few years and seriously discussed having children. Their families were supportive of their pregnancy. Yaneth attended IMSS clinics for check-ups and faithfully took her folic acid supplements. Yaneth and Carlos had little reason to be worried. Upon leaving the IMSS clinic where an ultrasound officially confirmed Yaneth's pregnancy, their faces beamed with such tangible excitement that the clinician told them there was no hope of surprising their family with the news. They were prepared and excited to be parents.

Isabel's birth, however, did not happen as Yaneth had planned it. She was born about three weeks early via a cesarean section and had to stay in the hospital for ten days before she was allowed to go home. Yaneth remembers Isabel's birth as a terribly stressful experience. Because her water broke early on a Saturday morning, when the clinic was less staffed than usual, the doctors arrived hours after she got to the clinic and she was left unattended for a long period of time. All the beds in the clinic were full. She shared a crowded room with other women, one of whose baby died. Another woman in a neighboring bed who was also named Yaneth passed away, causing Yaneth's mother and husband serious worry upon hearing that an unspecified Yaneth had died. Sometime during this hectic and drawn out birth, Isabel was deprived of oxygen. Isabel's primary pediatrician later suggested that her cognitive delays might be caused by this lack of oxygen at birth. However, attributing Isabel's condition to an

unfortunate birth complication does not satisfy Yaneth's desire to explain the history of Isabel's developmental delay.

While a lack of oxygen does play a role in the narrative Yaneth tells about Isabel's cognitive delay, she ultimately attributes the birth complication and therefore the cause of Isabel's disability to the dysfunction of the IMSS clinic. Yaneth refuses to reduce the cause of her daughter's affliction to a "disease that is specific to the individual patient and located discretely in" the body (Hamdy 2008, 558). As Sherine Hamdy's informants undergoing kidney dialysis in under resourced public hospitals of Egypt did, Yaneth invoked a "political etiology" of Isabel's delay. She attributed her daughter's cognitive delays and the resulting hardships she faces to "failures in state services and resources" (559), directly linking the difficulties she faced in seeking a diagnosis for Isabel to enroll her in a special education program to the inadequacy of the IMSS clinic. In November 2014, in a conversation about the difficulties Yaneth was facing to gather the diagnostic documents that the special education program had requested, she described Isabel's birth as traumatizing, associating the deficiency of IMSS resources to her present difficulty accessing educational support for her daughter:

Liz: The birth was traumatizing? What kind of trauma? Because of all that happened in the hospital, or...?

Yaneth: Yeah, all that they let happen to me during the birth. That they didn't attend to me quickly, that thanks to them I have to go on fighting like this. I say thanks to them because I think that if they had attended to me on time and all that, none of this would be happening...

-Conversation about accessing USAER resources, November 13th, 2014.

By situating birth complications within a story of a crowded clinic with long wait times, Yaneth asserted that Isabel's health conditions and the difficulty she faced in responding to them were not the unfortunate result of an isolated birth complication. Rather, they were caused by economic inequality and state failure. Yaneth relied on IMSS public services because her

family's working class wages were insufficient to access a private obstetrician. She resented her reliance on IMSS services because of the "(mis)treatment" (Hamdy 2008, 558) she received from an under resourced and understaffed clinic weakened by poor state investment. Consequently, she resolved to do whatever it took to avoid dependence on state services to secure the health of her children, even if that meant saving money to acquire costly private medical attention.

After the traumatic experience of Isabel's birth, Yaneth vowed to give birth to her second child in a private clinic in order to avoid the lapse in attention that contributed to Isabel's cognitive delays. Throughout her pregnancy with her younger son, David, Yaneth was seeing a private obstetrician, but when she went into labor unexpectedly her family rushed her to the IMSS clinic. She tried to delay the birth, demanding to be transferred to the private hospital with the obstetrician she had been seeing for prenatal care. Upon finding out that the private hospital would charge an amount unfeasible for them, Yaneth told her husband, "Carlos, it doesn't matter, you can find a way to get all the money, I am not going to *Seguro Social—ni de chiste* [I won't even think of it]." The risk of transferring to another hospital while she was in labor convinced her to give birth at IMSS, but she was worried the same thing would happen during her son's birth that had happened during Isabel's. David was born healthy and remains so today, but Yaneth's wariness of giving birth in the IMSS clinic brings to mind the "intense ambivalence" Hamdy's informants experienced as precarious economic circumstances forced them into a position in which they were dependent on, but deeply distrusted state provided relationships of medical assistance (Hamdy 2008, 563). Yaneth's strong desire but ultimate inability to give birth to her second child in a private hospital speaks to the "political etiology" of Isabel's delay and Yaneth's resulting resentment of the economic inequalities that made her family dependent on public health services, while at the same time making those unreliable.

Despite Yaneth's distrust of IMSS, she has relied on their services during her search for a way to respond to Isabel's cognitive delays. When it became increasingly apparent that Isabel was struggling with basic social and learning skills in elementary school, Yaneth took her to IMSS to be evaluated by a neurologist. The neurology department ran an electroencephalogram (EEG), a CAT scan, and an auditory test, but all of these reported Isabel had normal cognitive function. The news was not a relief. Despite the inability of these technologies to pinpoint a diagnosis, Yaneth was certain Isabel needed help with social and academic skills. The diagnostic tests she accessed through IMSS failed to give her any way to respond to Isabel's conditions.

Comparing each family's relationship to IMSS exemplifies how a diagnosis does not simply reflect a picture of the underlying physiology of a person's condition, but reflects the kinds of relationships of assistance each mother secures in her search to mitigate the afflictions of her daughter. These relationships of assistance are the forces that acted on Mar's and Isabel's diagnostic trajectories. The physiology of her disease did not independently define how each girl's trajectory unfolded. Rather, their respective trajectories reflect what resources their mothers could acquire depending on each family's job stability and access to reliable health insurance, and what diagnoses these enacted (or not). Consistent IMSS coverage facilitated Alma's ability to acquire diagnostic tests that produced first, a diagnosis of asthma and then a diagnosis of a cardiac arrhythmia. In turn, each diagnosis mobilized treatments that IMSS provided in response to Mar's health conditions—first, an albuterol inhaler, and second, continued cardiology monitoring—thereby solidifying Alma's trust in those diagnoses and in *Seguro Social*. In contrast, the complex character of Isabel's condition that went unrecognized by the neurologist's diagnostic technologies, Carlos' unstable employment, and the family's economic insecurity prevented Yaneth from acquiring a definitive diagnosis through IMSS, and

thereby weakened her ability to respond to Isabel's conditions through the organization. Thus, the inability of the institution to enact a diagnosis and subsequent relationships of assistance acted on Isabel's diagnostic trajectory by pushing Yaneth towards the private sector.

Private Practitioners

Yaneth's decision to seek therapy and diagnostic tests from private providers cannot be reduced to a matter of "patient choice" abstracted from the history that has formed the public and private sectors. Her dependency on private healthcare when Carlos was not formally employed was caused by the failure of the public system to provide for unemployed citizens, and her desire to seek out private providers when they did have insurance was a result of her negative experiences in under resourced clinics. The failure of the public system to satisfy the needs of people like Yaneth cannot be attributed to an inherent fault of state-funded healthcare. Rather, Yaneth's inability to access affordable healthcare resources is situated within a history of neoliberal health reforms that have bolstered the private sector and weakened the public since the 1980s. These reforms have gradually shifted the healthcare system away from public investment in, and provision of, health services, towards a greater participation of private service providers.

With varying degrees of success and pushback, the reforms, which can be clustered into approximately three waves of adjustments, have aimed to privatize and decentralize portions of the national public healthcare system (Homedes and Ugalde 2009). In 1983, Mexico received a loan from the World Bank (WB) and International Monetary Fund (IMF), which they had requested because of the financial crisis that Mexico suffered in the early 1980s (1). The structural adjustment stipulations required that Mexico cut public expenditure, including on

healthcare (1). As a result, the per capita public expenditure on healthcare dropped by 50-60% from 1982-1987 (Laurell 2007, 516).

A second wave of reform efforts in 1995-1997 aimed to restructure IMSS and the Ministry of Health. Pushback from the strong workers unions associated with *Seguro Social* prohibited the reform's success (Homedes and Ugalde 2009, 3-4; Laurell 2007, 517). A law that went into effect in 1997, however, did succeed in restructuring the contribution scheme of IMSS in a way that reduced the organization's financial resources, thereby deteriorating the quality of their service provision (Homedes and Ugalde 2009, 4; Laurell 2007, 516-517).

The third wave of reforms was rolled out in 2004 with the introduction of *Seguro Popular* to the public health system (Homedes and Ugalde 2009; Laurell 2007). This program's mission statement is noble: it was intended to improve universal coverage of the Mexican population by extending free insurance to those who are not covered by employment based schemes (Frenk et al. 2006; Homedes and Ugalde 2009). Like the other social security institutions, *Seguro Popular* is structured as an insurance scheme, but is offered to Mexicans without formal employment. Enrollment is voluntary rather than automatic. Individuals in the lowest two income brackets receive insurance free of cost, while individuals in the third income bracket and above are required to contribute monthly premiums (Homedes and Ugalde 2009, 4; Laurell 2007, 522). The insurance package covers a select basket of basic services, and some interventions deemed "catastrophic" due to cost, but it has been critiqued for being an insufficient and even misguided solution to the problem of inequitable access to healthcare services (Laurell 2007; Leal Fernández 2013). Hidden behind the stated goals of *Seguro Popular*, is legislation that actively exposes the public insurance institutions to private sector competition by allowing the public sector to subcontract service provision to private providers.

Additionally, publications authored by the Minister of Health who designed the 2004 reform, Julio Frenk, suggest that the introduction of *Seguro Popular* is one stage in a broader agenda of privatizing the delivery of services in the public health sector (Frenk et al. 2006, 1526; see also Laurell 2007, 520 for comment).

Authors such as Homedes and Ugalde (2009) and Laurell (2007) show how World Bank-informed logic of healthcare decentralization and privatization has informed each of these three stages of reforms. This history of neoliberal health policy reform has left its mark on the Mexican healthcare landscape. Today, Mexico is one of the OECD countries that invest the least (as a percentage of their GDP) in their public health system (OECD 2016, 57). In the percentage of its public funds spent on health, Mexico (51%) falls behind only the United States (48%) and Chile (46%). Out of pocket health expenditures are the highest among other OECD countries, making up almost 50% of all health spending (61). The ratio of private for-profit hospitals to million population (28.6) more than doubles the ratio of public hospitals (11.4) (63), demonstrating by yet another measure that private services occupy significant space in the healthcare landscape.

The effects of low public investment in the health system are apparent in Alma's and Yaneth's experiences navigating the healthcare landscape. The long waits that Alma and Yaneth (when she has insurance) endure to access IMSS services are a consequence of limited public investment.¹⁵ As a result, both Alma and Yaneth are driven to the private sector. Satisfied with the care her daughter receives in IMSS and in pharmacies, Alma's interactions with private

¹⁵ Both the ratio of practicing doctors and nurses to per 1000 population, and the bed density per 1000 population is very low compared to the averages for these measures in OECD members states (OECD 2016, 57). In terms of patient experience, under resourced hospitals and clinics translate into long wait times, like those that inconvenience Alma and Yaneth. See also, Laurell 2007, pages 518-520 for an overview of how Mexican public healthcare institutions are chronically underfunded.

providers are limited to pharmacies. Yaneth, on the other hand, is obligated to seek care from costly private practitioners due to a lack of reliable IMSS coverage and the pharmacies' inability to treat Isabel's cognitive delays.

Desperate for a way to respond to Isabel's disability, Yaneth has paid for therapy and diagnostic tests with private pediatricians, psychomotor specialists, speech therapists, psychologists, and a geneticist. To say that she has paid out of pocket for these services, however, would be misleading; Yaneth and Carlos do not have the money in their pockets with which to pay these providers. They had to stop sending Isabel to a psychologist because the services were too expensive to make the unnoticeable improvements worth the cost of the therapy. Yaneth had to borrow money from her brother to pay for consultations with a psychomotor specialist. To cover the cost of genetic testing, Yaneth considered taking out an official loan.

One place from which Yaneth may have been able to access consistent, affordable assistance for Isabel is through special education programs in the public schools, free of charge to those enrolled in them. These services are organized into two branches: Centers of Multiple Attention (CAM) and Units of Support Services to Regular Education (USAER). The former constitute services offered in education centers specifically dedicated to students with disability, and the latter are services integrated into general classrooms (García-Cedillo, Romero-Contreras, and Fletcher 2014, 67). USAER services are made up of a team of educators who collaborate with parents and general teachers to identify students with special educational needs and adapt the general curriculum to reflect their challenges (67). One team of USAER staff usually works in multiple schools, and their resources are limited (70).

Although the legal mandate and theoretical design of USAER is inclusive of students with diverse special educational needs, in practice the accessibility of USAER services is questionable. In order to enroll in USAER, a student needs to undergo a psycho-educational evaluation to determine whether or not they need special educational attention, and if so, of what kind (García-Cedillo, Romero-Contreras, and Fletcher 2014, 70). This evaluation usually involves reviewing the medical history of the student for any diagnoses of cognitive delay or learning disability. After reviewing the history of the student, the USAER staff determines if they need support in the classroom and if so, will work with the parents of the student to design a curriculum to fit their needs. The responsibility for requesting this evaluation usually falls on parents (70).

The limited availability and capacity of USAER programs make it difficult to secure enrollment. Only 10% of all public general schools in Mexico have USAER staff (García-Cedillo, Romero-Contreras, and Fletcher 2014, 78). Students with special educational needs in the remaining 90% of schools must either switch into a school with an USAER program, or must rely on the goodwill of the general classroom teacher to work with them (78). Because resources are limited, there is a high demand for USAER services. The parents of students like Isabel, who have special educational needs but don't have a clear diagnosis of disability, are burdened with demonstrating that their child merits access to the limited ability of USAER to provide support. A clear and documented diagnosis of learning disability thus increases the chances that a parent can access special education for their child. In November of 2014 Yaneth had recently requested a USAER evaluation for Isabel, at which point the director of the school had instructed her to gather all of Isabel's previous diagnostic reports. Thus, in order to access extra help in school for Isabel, Yaneth was on a quest for a documented diagnosis. IMSS inability to provide that

obligated her to turn to expensive private practitioners, but the only reports close to a diagnosis that Isabel has received from the private practitioners obligated Yaneth to pursue expensive, long-term therapy.

An anecdote that Yaneth narrated in November 2014 is especially telling of both the expense of acquiring a diagnosis in the private sector and the failure of the private sector to give Isabel a diagnosis that facilitated enrollment in USAER programs. When Isabel was about eight years old, she was attending therapy sessions with a psychomotor specialist to practice a range of cognitive and emotional skills. The cost of the therapy, set at 500 pesos per weekly session, was becoming unsustainable for Yaneth and Carlos, so they requested to reduce the frequency of visits to every two weeks. The specialist refused, arguing that consistent sessions were necessary if Isabel was to improve. Yaneth insisted there was no way they could pay that amount of money, so when the doctor continued to deny her request, Yaneth informed her they would no longer be sending Isabel to sessions and asked her to write up a report detailing her diagnosis of Isabel's delays and what skills they had practiced. Angry, the specialist retaliated by saying she would only write up the report once Yaneth brought her the five hundred pesos they owed for the previous session. Yaneth agreed to bring the money to her office the next day in exchange for the printed report, but the specialist became evasive, insisting that she did not have time to see them and would send the report over email after she received the money. Suspicious that the therapist would not follow through with her end of the deal, Yaneth and Carlos decided not to pay her, and ended what had been almost a year of therapy sessions without any documentation of a diagnosis or of what the psychomotor specialist had worked on with Isabel.

This narrative speaks to how the types of resources one acquires generate particular kinds of diagnoses. Yaneth and Carlos sought a way to help Isabel practice social, communication, and

learning skills, but their inability to use IMSS services obligated them to seek private practitioners. They could not sustain costly long-term therapy; so to transfer to more affordable support they requested an USAER staff member evaluate Isabel's learning needs. This USAER director then solicited documentation of any past diagnoses of Isabel's condition. Unfortunately, they did not have clear diagnoses to show USAER. The closest they had come to a diagnosis was with the psychomotor specialist who refused to give Carlos and Yaneth a report. The practitioner resisted giving them a diagnostic report that would facilitate transferring to another service provider, insisting that Isabel needed consistent and long-term psychomotor therapy. The specialist's unwillingness to giving Carlos and Yaneth a documented diagnosis can be understood as resistance to enacting a diagnosis that would help them access therapeutic services other than the ones she offered. Yaneth sought a diagnosis that would help her acquire affordable USAER services, but the practitioner wanted to give a diagnosis that would convince Yaneth Isabel needed to continue treatment with the expensive care she offered. As Yaneth tried to access USAER resources in 2014, she lamented having left the psychomotor specialist empty handed, as the lack of a clear diagnosis made the enrollment process more difficult.

Eventually the USAER director agreed to evaluate Isabel's learning disabilities differently, agreeing, despite the lack of a clear diagnosis, to make Isabel's teachers aware of her delays and give her extra reviews and exercises to practice skills in the curriculum. Isabel was 10 years old at this point. Two years later in 2016, when Isabel was nearing high school, her parents were again burdened with finding a school with an USAER program, enrolling her in that school, and then demonstrating to the USAER staff that her delays necessitated additional learning support. For a second time, acquiring special education resources for Isabel was a complicated process. There were only two schools in the area that had USAER staff, and the closest was more

than a half hour away. Yaneth worried the need for support would be even greater in high school than it had been previously, since Isabel would have so many different teachers who would likely be unaware of her learning disabilities or unable to dedicate time to work with her. Yaneth told her husband they needed to go to a private psychologist, even though they charge a lot, in order to get a diagnosis to facilitate enrolling Isabel in the USAER program

After giving Isabel psychometric tests and psychological tests and reviewing her long clinical history, this psychologist did give Yaneth and Carlos a diagnosis for Isabel's condition, but it cost them. To receive the tests and the diagnostic report they had to pay 600 pesos in addition to the 500-peso consultation fee, an amount that Yaneth emphasized was very expensive for them. As Yaneth described the expense, Carlos piped in saying, "Yeah, it was expensive, it was private. See, we didn't have *seguro* (IMSS) at that point, so we had to use private." This psychologist, much like the previous specialist, wanted Isabel to come in for weekly appointments after giving her a clear diagnosis. Yaneth explained that they could not afford 500 pesos every week, so did not intend on bringing Isabel to consistent therapies. They just needed the diagnosis. The psychologist insisted Isabel needed a lot of help, and offered to lower the price and frequency of therapy sessions.

This interaction with the psychologist is similar to the interactions Carlos and Yaneth had with the psychomotor specialist years earlier; enacting a diagnosis served different purposes for the specialist than it did for Yaneth and Carlos. The private practitioners charged for a diagnosis, and then expected Isabel to attend expensive weekly therapy sessions based on that diagnosis, an expectation that was very cost prohibitive for Isabel's parents. Yaneth and Carlos needed a diagnosis to facilitate enrolling Isabel in a free special education program. Unreliable IMSS services pushed Yaneth towards the private sector for care, but those practitioners' incentives to

prescribe long-term therapy, influenced her ability to acquire a diagnosis for Isabel and increased the burden of paying consultation and diagnostic fees out of pocket. The healthcare resources Yaneth and Carlos had access to acted on Isabel's diagnostic trajectory, shaping if she got a diagnosis, what kind of diagnosis she got, and what treatment that diagnosis was intended to mobilize.

The insufficiency of IMSS resources shaped both Mar's and Isabel's diagnostic trajectories, but in different ways. Mar's family consistently had IMSS coverage, so their access to free consultations and diagnostic testing for complicated health problems was much more stable than Isabel's family. Although Alma relied much more heavily on IMSS services and was more satisfied with them than Yaneth was, she too was swayed towards private sector care in circumstances when the long lines at IMSS clinics were burdensome. However, unlike the financial hardship Yaneth faced seeking care from private specialists, Alma sought private care from affordable and convenient pharmacies, because the services they offered seemed adequate to address Mar's coughs and respiratory difficulties. I will now turn to a discussion of how these pharmacies affected Mar's diagnostic possibilities.

Farmacias Similares

The pharmacies that Alma and Yaneth referred to when they complained about long wait times at IMSS are ubiquitous in Mexico City. *Farmacias similares*, or *simis* for short, are so named because they specialize in supplying generic pharmaceuticals, called *similares*, at low prices. They are owned and operated by private businesses and almost always have a doctor on-site to provide consultations and prescriptions. These pharmacies and their affiliated practitioners provide an affordable quick fix for minor afflictions like a cough, cold, or stomach bug. Thus,

they fill a void created by lengthy wait times at IMSS clinics. While these pharmacies are technically private health care, an interpretation of their prevalence as evidence that the high levels of out of pocket health expenditures in Mexico are “driven by dissatisfaction with the accessibility or choice of the services provided by [public] institutions... leading them [patients] to seek care from private health providers” (OECD 2016, 62), glosses over the complexities unique to Mexico City’s healthcare landscape. While they are privately owned, they are not expensive, and are much more accessible to the middle and low-income public than the term “private healthcare” usually denotes. As Cori Hayden points out, pharmacies specializing in generic pharmaceuticals blur the lines between the domains of “public” and “private” (Hayden 2007, 477). In this section I will elaborate on how *simis* pharmacies figure prominently in Mar’s diagnostic story, and what questions that raises about the kinds of diagnoses working-class families receive.

In Mexico in the mid-1990s a crisis of pharmaceutical shortages and skyrocketing prices motivated the government to actively promote the manufacture and sale of generic drugs—cheaper copies of name-brand drugs whose patents have expired. While there were Mexican institutions that had been producing generic drugs for many years, their sale had previously been directed towards IMSS and the other social security institutions, in order to lower the cost of medications provided to patients in the public sector. It was not until 1998 that the Ministry of Health made reforms to promote the sale of generic pharmaceuticals outside the social security institutions (Hayden 2007, 478). After this legislation went into effect, *Farmacias Similares*, a chain that proudly advertises its products as “*Lo mismo, pero más barato!*” (“The same, but cheaper!”), emerged as the business model that would quickly become a key player in Mexican healthcare provision.

Farmacias Similares, as its name and slogan make explicit, sells generic pharmaceuticals at a very low cost compared to name-brand versions of the similar drugs. From the beginning, the founder of the business, Víctor González Torres, framed the company's mission as a humanitarian one: extending healthcare services to those "who have the least" (Hayden 2007, 480). *Simis*, as they are known colloquially, sought to make pharmaceuticals affordable for those excluded from the public system due to unemployment or informal employment, and those excluded from the private system due to inaccessible costs (480). In addition to selling affordable drugs, González Torres was also innovative in the healthcare market for creating a model in which a certified doctor is available on-site at pharmacies to provide consultations (and, of course, prescriptions) at a very low price (485). Since a 2010 reform intended to bolster enforcement of the previously established but widely evaded regulation that required a prescription for antibiotics (Ellingwood and Sanchez 2010), this model of having a doctor on site has been a way to continue providing relatively easy access to prescription medications.

Farmacias Similares was the first to cater to a market of working-class and/or uninsured Mexicans, but its model of selling generic drugs and offering economical consultations on-site took off quickly and spread throughout Mexico and Latin America. *Farmacias Similares* proper is now the largest pharmacy chain in all of Latin America (Center for Health Market Innovations 2018), and the impact it has had in shaping the healthcare landscape of Mexico is tangible. In the first ten years of the 2000s an explosion of "knock-off" *simis* joined the original in catering to a working-class niche in the pharmaceutical market (Hayden 2013, 611). *Similares* or *simis* have become catchall phrases both for generic drugs, and the many pharmacies that sell them (Hayden 2007, 483). As you walk through the streets of Mexico City, you can be sure to find pharmacies selling generics in almost every neighborhood, even the ones with little commercial activity. It is

often difficult to distinguish between *Farmacias Similares* and the many *simis* emulating the original—save for the presence or absence of the cartoonish mascot of the smiling, open-armed doctor that greets customers on all the signage and advertisements of *Similares* proper.



A generics pharmacy of the popular chain, *Farmacias Similares*. To the left of the store's name is Dr. Simis, the brand's mascot. Photo taken by the author.



A knock-off *simis* pharmacy located in Colonia Periférico, near Alma's house. The red circle advertising "up to 75% less" mimics the branding of the original *Farmacias Similares*. The text to the right of the door advertises consultations with a certified doctor. Photo taken by the author.

When Alma and Yaneth spoke of taking their kids to the nearby pharmacy because they lacked the time to spend waiting at IMSS, they were referring to a neighborhood *simis* pharmacy. And the prices there are indeed cheap. In February of 2017, Alma paid 35 pesos, what was at that time the equivalent of about \$1.68 USD, for a consultation and medications at the pharmacy. Pharmacies that sell *similares* are a resource that both Alma and Yaneth rely on, but their prevalence is especially noticeable in Mar's diagnostic trajectory. In her field notes, Liz often commented on how surprised she was to notice the extent of Alma's knowledge about the generic names of medications. When Liz asked what Mar was taking for her cough, Alma listed the generic names of sometimes up to five drugs. Alma's extensive knowledge of generic pharmaceuticals speaks to how prominently *similares* (the pharmacies and the drugs) figure in the healthcare landscape that shapes Mar's diagnostic trajectory.

Alma frequently treated Mar's symptoms of respiratory difficulty, persistent coughs, and colds with medications a doctor prescribed and Alma purchased at the nearby *simis* pharmacy. To simply describe these clinical interactions as private healthcare obscures the quality of *simis* pharmacies that has made them so successful—they specifically target working-class consumers historically excluded from the private medical market by making medications and personalized medical attention affordable and efficient. Generics capitalize on the fact that drugs are outside of patent protection (in that sense, they are in “public” domain) to make pharmaceuticals and consultations more accessible to working class publics (Hayden 2007, 475). Because off-brand drugs provide an affordable alternative to their corresponding branded counterparts, the promotion of generic drugs is often equated with “*política pública*”—statist politics that promote the welfare of the population (476). González Torres, through the rhetoric of his brand and the many social service programs linked to and partially funded by the profits from his *Farmacias*

Similares chain, has intentionally tried to foster an image of a private citizen working on behalf of working-class and marginalized populations (484-486).

However, at their core the pharmacies that sell *similares* are private, for-profit businesses. In this way, *similares* (the drugs and the pharmacies) complicate our expectations of what a healthcare landscape looks like. Hayden is right to point out that, “the question of the generic in Mexico is important and useful... because it unravels and reworks received vocabularies on the relationship between public and private in distinctive and vivid ways” (Hayden 2007, 477). In Mexico, private care does not entirely align with expensive care, and at pharmacies, may be even more economical and convenient than public care. For Alma and Yaneth and many other working class families, the cheap source of private healthcare (generics pharmacies), may be even more public (in the sense that they are accessible and target working-class populations) than the services social security institutions provide (488).¹⁶ The 2016 National Survey of Health and Nutrition reported that wait times in *simis* pharmacies were comparable to wait times in expensive private clinics, both of which had significantly shorter wait times than every social security institution (Secretaría de Salud 2016).

What consequences will result if pharmacies, which are by definition in the business of selling pharmaceuticals, surpass the ability of the social security institutions to provide satisfying and efficient medical attention to working-class people of Mexico City? As we think through where Alma seeks a response to her daughter’s health conditions, it is important to keep in mind

¹⁶ See also Hayden (2007) for a discussion of how this dynamic of cheap, private healthcare implicates generics pharmacies in the neoliberal efforts to privatize healthcare in Mexico and throughout Latin America: “the turn to generics, as executed by Farmacias Similares, is far from a challenge to neoliberal trade regimes. Rather, it is a part of a complex and ongoing privatization of health care in which the burden of medication costs is increasingly shifting toward individual consumers and particularly the poor” (488).

how pharmacies as a source of healthcare may affect the sorts of diagnoses that patients receive, and how those diagnoses in turn shape physiological processes.

It was apparent with one glance at the shelf where the family stored medications that Alma's most reliable form of biomedical assistance for Mar was pharmaceuticals: almost every time Liz visited Alma's home, the designated medication shelf displayed a line-up of antibiotics, painkillers, cough suppressants, and decongestants. In January 2015 Mar was taking Clavipen (an antibiotic, amoxicillin), Oxolvan (a decongestant), Ibuprofen (an anti-inflammatory and pain reliever), and Guaxoquim (a decongestant and cough suppressant syrup) to treat a "bad cough." In February of 2017, after Mar had been diagnosed with an arrhythmia, she was Clavipen (the same amoxicillin antibiotic), Epicol (a decongestant and cough suppressant), and Laritol Ex (loratadina/ambroxol, an antihistamine and decongestant) to again treat a cough. Alma treated Mar's frequent coughs and colds in much the same way while she had an arrhythmia as she had previously when Mar was diagnosed with asthma. Mar's diagnosis had changed, but the pharmaceuticals, many of them antibiotics, that Alma used to treat Mar's coughs and colds remained consistent. The inefficiency of IMSS clinics frequently pushed Alma towards *simis* pharmacies to respond to Mar's coughs and colds. There, pharmacy doctors enacted diagnoses that facilitated the sale of pharmaceuticals, many of these antibiotics. Mar's case demonstrates how the types of healthcare resources accessed during a diagnostic trajectory shape the diagnoses that get enacted, in turn generating particular kinds of responses. I will now turn to an analysis of how the diagnoses enacted in Mar's and Isabel's trajectories shape their bodies and life circumstances.

Chapter Three: The Productive Power of Diagnosis

Mar: Direct Effects of Diagnosis on Physiological Realities

Both of Mar's diagnoses, first of asthma and later of a cardiac arrhythmia speak to the power of diagnosis to produce material reality. When Mar was diagnosed with asthma at one and a half years old, Alma was instructed to use an albuterol inhaler to treat coughing fits, and avoid asthmatic irritants. This diagnosis shaped the life circumstances of Mar and her family. Alma and Carlos decided not to adopt a dog despite Dany's requests, Mar avoided strenuous exercise, and Alma added an albuterol inhaler to her repertoire of medications to treat Mar's coughs.



The medications Mar was taking for a cold in February 2015, while she was still diagnosed with asthma. Cefalver, pictured on the left is an antibiotic. The albuterol inhaler sits in front of it. Photo by Liz Roberts.

In turn, the albuterol inhaler shaped the physiology of Mar's conditions. The reason Alma understood Mar's diagnosis of a cardiac arrhythmia as a negation of asthma, was because the IMSS cardiologists that diagnosed the arrhythmia instructed her to stop treating Mar with an inhaler. As Scott informed

me, albuterol has been linked to increased frequency of premature atrial contractions. Concern

that albuterol was increasing the frequency of Mar's irregular heartbeats may have lead the IMSS cardiologists to undo the diagnosis of asthma by instructing Alma to cease using the inhaler. The diagnosis of asthma, by generating a treatment of albuterol, shaped Mar's bodily processes.

The diagnoses that the *simis* pharmacies produced throughout Mar's diagnostic trajectory mobilized a constant stream of antibiotics. These are likely to cause antibiotic resistance, which will have a lasting negative impact on Mar's physiological wellbeing. Hannah Landecker uses the term "biology of history," to describe how historical eras and the scientific practices and theories, political policies, and events therein transform the microbiologies of bodies and environments (Landecker 2016). Biopolitical rationalities, she argues, do not just "enact specific knowledge regimes"; they enact biologies (43). Antibiotic resistance can be understood as the "particular biology of modern history" that industrialization, scientific concepts of medical interventions targeted at specific pathogens within individual bodies, and political policies created (43). By linking Landecker's work on antibiotic resistance with Hayden's work documenting the saturation of the Mexican health care landscape by *simis* pharmacies that sell affordable antibiotics and to working class populations we can ask important questions about the material effects of the policies that have opened space in the Mexican healthcare landscape for *simis* pharmacies. Namely, the reforms of the 1990s that encouraged the sale of generic pharmaceuticals, the neoliberal efforts to bolster private sector activity and profits, and the 2010 reform that has created a proliferation of on-site pharmacy doctors. Surely the cheap and convenient source of prescription antibiotics, painkillers, and other medications that *simis* pharmacies provide shapes the biologies and diagnostic trajectories of working-class Mexicans in distinctive ways.

While it may be appealing to laud *simis* pharmacies as *política pública* that increases working-class families' access to medical attention and sometimes necessary medications, we must pause to question what sort of medical attention pharmacies offer (Hayden 2007). Because of affordable pharmacies, Alma's ability to respond to her daughter's health conditions remained stable, despite a change in Mar's diagnosis and despite the inconvenience of IMSS clinics. But the stability Alma had access to was, in large part, a steady stream of antibiotics—which, as Stonington informed me, have been thoroughly disproven to relieve coughs, colds, and breathing difficulties other than those directly associated with a respiratory infection. Under resourced clinics frequently drew Alma away from IMSS services and pushed her instead towards *simis* pharmacies to treat Mar's symptoms, making a specific brand of diagnoses available—those associated with the sale of pharmaceuticals. The treatments Mar received at the pharmacy, which more often than not included antibiotics, will in turn shape her biology in ways that might jeopardize her ability to respond to legitimate infections in the future (antibiotic resistance).

Mar's diagnostic trajectory characterized by inefficient, underfunded public clinics and a reliance on *simis* pharmacies, raises questions about what might happen to working class health if the medical certainty available to working class populations is a reliable stream of antibiotics. Thus, tracing Mar's diagnostic trajectory allows us to examine the materiality of healthcare inequalities in new ways, prompting us to explore health inequity beyond questions of whether or not working class people have access to healthcare. Her trajectory exemplifies how specific diagnoses shape life circumstances and physiologies, and furthermore, demonstrates how public policies that defund the public sector, bolster the private sector, and saturate the market with cheap pharmaceuticals may distribute antibiotic resistance disproportionately among the bodies of working class people.

Isabel: Economic and Healthcare Instability and the Vulnerability of a Female Body

Isabel's intensely uncertain diagnostic trajectory further exemplifies how life circumstances, diagnosis, and bodily states interact. By now it should be apparent how Isabel's diagnostic trajectory was entangled with her family's economic instability and lack of consistent affordable healthcare. Yaneth's and Carlos's unstable insurance made it difficult to see one practitioner consistently, which complicated enacting a diagnosis for Isabel's cognitive delay. The lack of a diagnosis in turn made it difficult for Yaneth to enroll Isabel in schools that provided affordable support for students with special educational needs. One school turned Isabel down, saying she was not disabled enough to merit special attention. The primary school that Yaneth was consulting in 2014 allowed Isabel to enroll in the USAER program, but not until after a lengthy process in which Yaneth struggled to demonstrate proof of Isabel's needs. Later in 2016, the necessity to find and enroll Isabel in a high school with USAER resources again spurred a costly search for a definitive diagnosis, pushing Yaneth to pay for an expensive diagnostic report and therapy with the psychologist described earlier. Carlos and Yaneth strained their own and their extended family's financial resources, borrowing money from Yaneth's brother, increasing the time Yaneth dedicated to direct sales, and even taking out an official loan to pay for genetic testing for Isabel. These expensive consultations and diagnostic tests were both partially caused by and exacerbated the family's economic instability and lack of access to affordable healthcare.

It is less intuitive to understand how the healthcare landscape shaped Isabel's diagnostic trajectory in ways that affected her bodily security and physical practices. As I described early on in the overview of Isabel's diagnostic trajectory, the anxiety that Yaneth experienced in relation

to Isabel's cognitive delay was partially due to a concern for her daughter's physical safety. The lack of awareness about social relationships associated with Isabel's delays made it more difficult for her to recognize physical threats while she navigated the neighborhood. As Isabel neared adolescence, Yaneth understood her inability to act in response to her daughter's cognitive delays as dangerous—if Isabel could not learn to be *auto-suficiente* she would not be able to avoid predatory men or navigate bullies in high school, which would make her female body more vulnerable as it developed. This worry for Isabel's physical security, more so than a worry for Isabel's academic success or future career, prompted Yaneth's search for a way to respond to Isabel's delays.

Yaneth and Carlos were paying out of pocket to mitigate the possible threat to Isabel's body while they were undergoing the uncertain process of enrolling Isabel in a high school with USAER staff that would hopefully practice social skills with Isabel for a more affordable price. In the meantime, they were paying for Isabel to attend therapy sessions with a neurologist who was helping Isabel practice self defense:

Yaneth: What worries her [the neurologist] and I think what worries me the most... is that she, umm... she keeps growing—she keeps growing and she doesn't learn to defend herself, to be independent. So, that's what, that's what they think [the doctors] they have to prevent right now.

Liz: She needs to learn to defend herself and learn what the borders are between people?

Yaneth: Yes, exactly. Especially with boys. I think that is the reason for what the psychologist is practicing with her.

-Yaneth and Liz, March 7th, 2017.

Because feeling Isabel's safety hinges on an ability to access programs or practitioners that practice social skills with her, Isabel's bodily wellbeing is entangled with the specificities of the healthcare landscape—the difficulty of enrolling in public special education resources necessitated private therapy, the cost of which strained Yaneth and Carlos's already fraught

economic situation. The diagnoses and relationships of assistance she accessed in Isabel's diagnostic trajectory shaped Isabel's future physical security at the same time that these relationships of assistance were themselves shaped by the inaccessibility of resources to address Isabel's cognitive delay in the public healthcare system, the difficulty of accessing care in the public school system, and the cost of therapy in the private sector.

Both Mar's and Isabel's diagnostic trajectories exemplify how the local conditions of a healthcare landscape interact with the specificities of a person's health conditions to influence the enactment of particular diagnoses and corresponding, therapies which result in material realities that affect the life circumstances and physiology of the people involved in the diagnostic trajectory.

Conclusion

The purpose of this discussion of how economic circumstances and the healthcare landscape interact to shape Mar's and Isabel's diagnostic trajectories, is to shift the understanding of diagnosis away from a paradigm that understands diagnosis as a linear process concerned with documenting an objective underlying, disease reality that will manifest the same in different bodies and different places. In the first section I described how each mother's engagement with biomedical practitioners, diagnostic tests, and treatments was not a quest for certainty in a diagnostic category, but was rather characterized by the search for certainty in the ability to respond to their daughter's health conditions. Diagnosis was useful in that it had the potential to generate action, rather than knowledge.

In the second section I stressed how Mar's and Isabel's diagnostic trajectories were entangled with employment status, decades of health system reforms, and pharmaceutical

ecologies in order to highlight how particular relationships of assistance coalesced to bring particular diagnoses into being (to enact diagnosis, Mol 2002). Underfunded IMSS clinics and unstable formal employment acted on Isabel's diagnostic trajectory, pushing Yaneth to seek a diagnosis from the private sector. Yaneth's inability to respond to Isabel's health conditions through the public sector obligated her to seek treatment from the private sector, which enacted diagnoses that prescribed long term, expensive therapy. Mar's case demonstrates on the one hand, how stable access to IMSS care was fundamental to the enactment of both the diagnosis of asthma and of cardiac arrhythmia, and on the other hand, how the inefficiency of IMSS services pushed Alma towards *simis* pharmacies to find quick fixes for Mar's coughs. Steady IMSS coverage and cheap *similares* pharmacies allowed Alma to remain confident in her ability to respond to Mar's respiratory problems despite a change in diagnostic category. But long lines at the IMSS clinics linked to decades of policies that have weakened social security institutions made it so that the most consistent relationships of assistance Alma accessed for Mar were consultations with pharmacy doctors that prescribed antibiotics almost every time she came in for a consult.

In the third section, I analyzed how the diagnoses that the particular healthcare resources Yaneth and Alma had access to enacted particular diagnoses, which shaped Mar's and Isabel's material realities. Mar's case demonstrates how the kind of healthcare and diagnoses one has access to in the search for certainty in response to a child's health conditions produce particular bodily outcomes. The diagnosis of asthma mobilized a treatment plan that included an albuterol inhaler, which increased the frequency of Mar's irregular heartbeat, eventually leading to the detection of that arrhythmia and the negation of her asthma diagnosis. Alma's heavy reliance on *simis* pharmacies and the steady stream of antibiotics they prescribed will very likely produce

antibiotic resistance, threatening Mar's future physical wellbeing. In Isabel's case, economic instability and the insufficiency of the public healthcare system to provide for families with transient formal employment made it difficult to receive a diagnosis. The limited investment in public special education programs made enrolling in them more difficult without a clear diagnosis, which jeopardized Yaneth's possibilities for accessing resources that would help Isabel practice the skills necessary to fend for herself in high school and on the streets. Uncertainty in economic circumstances and healthcare resources made certainty in a diagnostic category more difficult to achieve, which in turn exacerbated Yaneth and Carlos' financial instability, and negatively impacted Isabel's future bodily safety. Isabel's case demonstrates the looping effects of unstable economic circumstances, unreliable health care resources, uncertain diagnosis, and gendered physical vulnerabilities.

The resources involved in the search for a response to one's health conditions not only reflect and affect familial economic stability and local health care dynamics; they also have lasting physical effects on the body and life circumstances of those involved in the diagnostic trajectory. Together, Isabel's and Mar's cases demonstrate how diagnosis, both in the health conditions it describes and the actions it produces, is always entangled with physical conditions, access to reliable public healthcare, prohibitive costs of private specialists, the necessity to care for your loved ones, social services bureaucracies, and legislation that influences the healthcare landscape.

The relevance of tracing these two diagnostic trajectories extends beyond narrating mother-daughter stories, and extends beyond a commentary on the healthcare landscape of Mexico City to reflect on diagnosis more generally. By tracing these diagnostic trajectories I emphasize that the diagnostic process is always situated; diagnostic trajectories cannot be

abstracted from the historical, political, physiological, and social forces that act on them (Lock forthcoming). To ignore the institutional, economic, social, and biological contexts in which diagnosis is embedded reduces the complex reality of the interactions between biological processes, institutions, and life circumstances to an idealized notion of diseases that exist outside material realities and historical processes. Many authors have demonstrated that diagnosis is about *doing* (Stonington forthcoming; Street 2014; Rosenberg 2007). I add to those conversations by providing a way to theorize the looping interactions of bodily states, life circumstances, and diagnosis, arguing that diagnosis is about doing, but pushing the conversation further to argue differential access to healthcare resources shapes a diagnostic trajectory in ways that have lasting effects on bodies. Diagnostic trajectories, as I have conceptualized them here, offer a way to think through diagnosis as a situated and consequential process. Tracing diagnostic trajectories provides a way to contribute to anthropological analyses of how particular settings reproduce and distribute health inequalities. Isabel's and Mar's diagnostic trajectories illuminate how an increasingly underfunded public healthcare system in Mexico interacts in looping relationships with a family's socioeconomic status, diagnostic possibilities, and bodies in ways that disproportionately increase the health inequities that burden the lives of working class people.

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