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Médicos Boricuas en la Luna:
Morals, Markets, and Medicine in Puerto Rico

By

LAUREN ACOSTA
DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

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in the

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of the

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DAVIS

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2022

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Abstract

Research on moral economy and medicine has focused on the Global North, disregarding colonialisms' impact on contradictions between medical values and medical markets. Using historical sources and interviews with Puerto Rican physicians, this study examines the conflict between medical ideals and economic realities in the periphery, exploring morals, markets, and medicine in Puerto Rico. Early medical development in Puerto Rico under the Spanish and United States colonial regimes culminated in a contradictory set of medical values: government responsibility for providing healthcare, biomedical superiority, medical work as a patriotic duty, and medical legitimacy as reliant on American medicine. Puerto Rico's attempts to institutionally balance the right to universal healthcare with use of expensive biomedical technology within the political and economic subjugation accompanying its relationship to the United States has culminated in a private, for-profit, HMO-style healthcare system (Reforma) and a healthcare crisis characterized by lack of resources and medical inaccessibility. Puerto Rican physicians' professional identities help them make sense of moral economy contradictions, emphasizing their connection to American medicine while claiming superiority to mainland doctors for their ability to "do more with less" to ensure patients' access to biomedical services. Doctors use their professional identities to inform and interpret socially-embedded, redistributive, cross-Caribbean community responses to the island's healthcare crisis. This research illustrates how medical moral economy functions within a colonial environment, how neoliberalism and biomedicine are pushed onto Southern contexts better served by a sociomedical approach to care, and how neoliberal healthcare systems are supported by informal community networks.

Keywords: moral economy, colonialism, professionalization, professional identity

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Chapter 1: Introduction

March 13, 2018, Ponce, Puerto Rico

"Que aventura!" my Uber driver exclaims as we narrowly skirt a gaping pothole blocking the parking lot entrance. Dr. Ortiz's clinic is conveniently located across the street from a large hospital, but the quintessentially 80's-style building looks dated. Swaths of peeling mint-green concrete dwarf the façade's utilitarian windows, and salmon paint from another era peeks out from beneath. Dr. Ortiz meets me just outside the front door, and we walk together up three flights of stairs to his office.

"How long has the elevator been broken?" I pant in Spanish.

"Since Maria" he responds. Six months. Dr. Ortiz says he's been seeing patients unable to make the multi-story trek to his clinic in the building's lobby. "What else can you do?" he laughs.

Dr. Ortiz's office is small, just roomy enough to hold a dark wooden desk and matching bookshelf that displays his Universidad de Puerto Rico medical degree. But he likes working here. "It's close to my house, so I can go see my family during lunch" he explains. And more broadly, he wants to be in Puerto Rico. "I can help here. I know things are going well for Tommy in Houston, but for now, I'm staying here."

December 5, 2017, Houston, Texas

"Tommy" refers to Dr. Tomás Martinez, one of Dr. Ortiz's friends from medical school who moved to Texas for a pediatric oncology fellowship in 2009. When I interviewed him just after Thanksgiving, Dr. Martinez was working in a brand-new children's hospital with big windows, colorful murals, and an expansive parking garage that allowed direct access to his floor.

Dr. Martinez had two frames hanging on his office wall. One, like Dr. Ortiz, was his Universidad de Puerto Rico medical degree. The other was a large photograph of a heavily vined, vividly green tree in el Yunque, the rainforest in Puerto Rico. "Being Puerto Rican is an important part of me," he explained during our interview, gesturing to the image. Still, after years of interviewing for various positions on the island, Puerto Rico's low pay, lack of research opportunities, and high crime rates had kept him in Texas.

"It's hard" Dr. Martinez sighed. "You have to balance how much you help Puerto Rico without sacrificing your profession and your family."

The circumstances described by Drs. Ortiz and Martinez are emblematic of the situations many Puerto Rican physicians grapple with in the wake of Puerto Rico's ongoing healthcare crisis. Since the early 2000's, the island's medical arena has been characterized by privatized, for-profit managed care, a large population of indigent patients dependent on public funds, scarce medical resources, and decreased access to doctors as native physicians move to the U.S. mainland. As Dr. Martinez noted, Puerto Rican providers on and off the island struggle to "balance how much [they] help Puerto Rico" with their professional aspirations and familial duties. Physicians like Dr. Ortiz who remain in Puerto Rico deal with the fallout of the healthcare crisis directly, retaining personal and professional access to the island community but foregoing the prestige, income, and better work conditions available in the United States. In contrast, the occupational success available to providers like Dr. Martinez who move to the mainland comes at the expense of proximity to their Puerto Rican family, friends, and patients.

Puerto Rico's healthcare crisis is linked to its present-day relationship to the United States; the island's territorial status weakens its economy by fostering economic dependence on the U.S., undemocratically subjects it to federal legislation that limits public healthcare funding while encouraging U.S.-style neoliberal healthcare organization, and enables the brain-drain of native physicians to the mainland. At the same time, Puerto Rico's healthcare problems are a natural outgrowth of the ways in which the island's foundational medical development under the Spanish and early U.S. colonial regimes encouraged the adoption of contradictory medical ideals that promoted colonial domination and constructed medicine in Puerto Rico as "inferior" to, and dependent on, medicine in the United States. More specifically, Puerto Rico's belief in government-sponsored universal healthcare access, idealization of an expensive biomedical approach to care, and understanding of medical practice as a patriotic enterprise have proved

incompatible with the island's colonial economic reality, especially in the face of the administrative and revenue expenses that accompany U.S.-influenced neoliberal provision of care.

At an institutional level, the political, economic, and cultural impacts of Puerto Rico's colonial context complicate the island's ability to enact healthcare systems that balance its medical values, market conditions, and local healthcare needs. At an individual level, these same colonial tensions, and the healthcare systems they produce, influence the ways in which Puerto Rican physicians on and off the island respond to, and moralize their responses to, the island's healthcare crisis. The story of medicine in Puerto Rico, which demonstrates how the inherent value contradictions, market limitations, and legislative restrictions accompanying colonization affect both healthcare administration and medical practice in the periphery, provides valuable insight into how imperialism contributes to global health disparities and recurring healthcare catastrophes in the Global South.

A Brief History of Puerto Rico's [Medical] Cris[es]

Over the past several years, Puerto Rico has spent a sizeable amount of time gracing the headlines of mainstream American papers. First was the announcement by then-Governor Alejandro Garcia Padilla in June of 2015 that the island's $72 billion in debt to Wallstreet investors was "not payable," and that the island had entered a financial "death spiral" (Corkery & Walsh, 2015; Sullivan, 2018). Unable to declare bankruptcy[1], what followed was a series of austerity measures enacted by a federally mandated Fiscal Oversight Board of presidential

[1] As a U.S. territory, Puerto Rico is denied the ability to declare bankruptcy or restructure debt at both the commonwealth and municipal level. In contrast, Chapter 9 of the Federal Bankruptcy Code allows states to authorize their municipalities for both bankruptcy and debt restructuring (Gulati & Rasmussen, 2017).

appointees, and cuts were made to commonwealth spending on healthcare, education, and public services (Cabán, 2018; Meléndez, 2018). Then, in September of 2017, Hurricane Irma, and more catastrophically, Hurricane Maria, struck the island in rapid succession, the latter leading to $102 billion in damage and an island-wide blackout that left some areas without electricity for almost a year (National Hurricane Center, 2018; Román et al., 2019; Santos Lozado et al., 2020). Coverage of the hurricane became a sort of tipping point in United States' consciousness of Puerto Rico. In reading accounts of Puerto Ricans carrying clean water back to their homes in 5-gallon buckets, in watching scenes of islanders standing amidst piles of rubble and fallen palm trees, Americans on the mainland were also confronted with scattered coverage of a more extensive disaster: an ongoing economic recession, an accompanying pre-Maria boom of migration to the states, and, finally, an insidious and protracted healthcare crisis.

Puerto Rico's healthcare crisis has perhaps received less attention than some of the island's more sensationalized hardships, but its significance is no less daunting. Puerto Ricans are American citizens, and pay the same federal payroll, social security, customs, and commodity taxes as their state-side counterparts. While islanders do not pay federal income tax on earnings from the territory, neither do over 40% of all state-side residents[2], and the commonwealth's federal tax contribution is roughly equal to that of Vermont. However, the territory is granted less federal funding for Medicaid than U.S. states, has comparatively lower reimbursement rates for both Medicaid and Medicare, and residents of Puerto Rico are denied access to many Medicare subsidies available to those living on the U.S. mainland (Campbell Fernández, 2017; Mulligan, 2014; Roman, 2015). At the same time, the poverty rate in Puerto

[2] State-side residents often do not pay federal income taxes because of low income, tax credits, and/or tax deductions (Gleckman, 2022).

Rico is 43%, more than double the rate of Mississippi, the poorest U.S. state (Chandra et al., 2021). Furthermore, record-breaking outward migration to the United States in the face of protracted economic stagnation[3] has raised the median age of island residents, with 26% of the population aged 60 or older (Glassman, 2019). The need for publicly subsidized healthcare on the island is high, with 60% of the population covered by Medicaid or Medicare, but capital and supplies are low (KFF, 2017).

Low pay and resource shortages accompanying the island's under-funded healthcare system have contributed to the movement of Puerto Rican physicians to the United States. Between 2010 and 2019, 13% of the doctors and surgeons in Puerto Rico left for jobs on the mainland, and the accompanying decrease in medical services left 72 of the island's 78 municipalities designated "medically underserved" by the United States Health Resources and Service Administration (NPI, 2020). As patients in Puerto Rico struggle to access increasingly limited medical care, the island has seen increased mortality rates for a myriad of medical conditions, from diabetes to hypertension (Acevedo, 2021; Respaut, 2016).

Importantly, Puerto Rico's present-day medical market is defined not only by scarcity, but also by privatization. The island's current medical system, the Reforma System, seeks to organize medical services according to neoliberal principles, contracting Medicaid patient's care through private, for-profit, HMO-style insurance carriers and promoting the privatization of hospitals and clinics. This is notable not only for its reflection of a global U.S.-led trend towards greater commodification of medical care, but also for the way that it drastically departs from the

[3] Between 2006 and 2016, a net total of 646,932 people migrated out of Puerto Rico, representing the largest population loss for any decade since the United States landed in Puerto Rico in 1898 (Mora et al., 2017). Santos-Lozada et al. (2020) found that continued population loss after the hurricane season of 2017 can be accounted for by the island's struggling economy rather than hurricane-related destruction.

island's previous healthcare policy. Until 1993, healthcare in Puerto Rico was universally accessible for all, and provided by doctors employed and medical facilities owned and operated by the commonwealth government.

In some ways, the situation in Puerto Rico simply represents one possible "contradiction inherent in the commodification of [care]" (Reich, 2014, p. 10), namely, the contradiction between "healthcare as a right and healthcare as a scarce commodity" (p. 5). Medical services previously institutionalized as civilian entitlements have been transformed into purchasable assets, and, in the wake of the island's healthcare crises, access to these assets has become increasingly limited. However, the island's long-standing status as first a Spanish and later a United States colony complicates this position. Medicine in Puerto Rico is inextricably linked to dominating colonial powers. Early medical developments were designed and implemented by colonial regimes; foundational medical values, including the right to medical care, were promoted by invading colonial forces; medical institutions like the Puerto Rico Department of Health began their lives as official arms of the colonial government and implicit tools of colonial control; medical education, training, and practice remain subject to U.S. medical standards that prioritize expensive biomedical treatment over sociomedical considerations; current medical regulations are set by a U.S. congress in which Puerto Ricans lack a voting representative. Puerto Rico's initial implementation of universally accessible public healthcare, the eventual replacement of this system with for-profit, privatized medicine in line with U.S. healthcare markets and federal policy pressure, and the resulting ethical and economic tensions can only be fully understood by explicitly considering the impact of past and present colonial influence on the island's medical sphere.

Just as colonialism shapes and restricts the economies, cultures, and social contexts of the Global South, so does it impact their medical values, medical organization, and provision of medical services. Moreover, colonialism frames how colonized actors make sense of, and respond to, the contradictions between medical values and medical markets, guiding the social ideals from which they draw inspiration, influencing the institutional regulations structuring their actions, and narrowing the "legitimate" pathways to resolving tension between market realities and ethical principles. This dissertation examines the conflict between medical ideals and economic pressure in the periphery, using Puerto Rico as a tool for exploring morals, markets, and medicine within a colonial context.

Morals, Markets, and Medicine

Medicine, which sits uncomfortably between its standing as a social good and its increasingly overt connection to a private, capitalistic market, has proved a fertile ground for investigating moral economy, allowing scholars to consider the relationship between individuals' ethical values and economic actions. Recently, researchers have articulated that institutional ideals and organizational regulations play an important role in shaping healthcare workers' medical principles and influencing how they balance their economic interests and moral considerations (Livne, 2019; Reich, 2014). In highlighting the significance of institutional context to medical moral economy, investigators inadvertently exposed the importance of including the Global South in sociological theory building around moral economy. The well-documented, ongoing metropole influence over medical institutions and medical professionals in the periphery, both through cultural hegemony and explicit imperial control, indicates that a complete understanding of moral economy within medicine should incorporate the Southern

experience (Bockman, 2015; Ekeocha, 2018; Lo, 2002; Nkrumah & Mkrumah, 1965; Rao 2000; Wendland, 2010; Uzoigwe, 2019).

Overview

Economic sociologists have worked to dispel the myth of an ideal-typical market, renouncing the illusion that economic activity is carried out by fully-informed buyers and sellers following a rationale governed purely by self-interested competition. Instead, "moralized market" scholars assert that people use economic encounters as a tool for defining relationships, articulating power structures, and expressing moral ideals. According to Viviana Zelizer, economic activity is conducted in part through adherence to "relational packages" (Zelizer, 2005, p. 56) consisting of:

1.) Social ties, or connections among individuals or groups,

2.) Economic transactions, or interactions conveying goods or services (e.g. loan),

3.) Media, or representations of the right to goods and services (e.g., money, time), and

4.) Negotiated meanings, or participants' understandings of transactions/media. (Zelizer, 2012)

Zelizer posits that people perform "relational work" in order to "match" their relationships and values with their economic lives. More broadly, Zelizer sees commodification itself as a moral and cultural under-taking. Through her investigation of the successful commodification of life insurance, Zelizer (1979) demonstrated that a "bad match" between money and the death of a loved one can be moralized as a "good match," wherein money is made into a tool of remembrance through specific cultural practices (e.g. a personalized insurance agent). Similarly, Kieran Healy's (2006) examination of blood and organ donation found that organ procurement organizations (OPOs) "produce and institutionalize cultural resources" (p.

117) that provide donors with cohesive accounts of gift-giving even in the face of financial incentives. Healy noted that OPOs disconnect organ procurement from accompanying financial considerations by tasking "family support" staff separate from the medical sphere with obtaining donation consent, and by providing donors and their families with a perspective on organ donation focused on heroic action and bringing meaning to death.

Healy's study fits into a larger body of work focused on the commodification of medical care. While this has been a particularly important avenue of study in the United States, where the expansion of for-profit insurance, medical institutions, and pharmaceutical companies has given the market increased influence over medical practice, neoliberalism has become a defining feature of health on a global scale (Conrad 1992; 2005; Keshavjee, 2014; Light 2010, Starr, 1982). Many researchers have noted that the commodification and subsequent relational work around medicine is complicated by what are often "bad matches" between medical values and the market drive for economic efficiency. Medical care is generally conceptualized as a social good, and medical practitioners are ostensibly bound by ethical codes that require them to place patients' medical needs over profit (Baker, 2013; Reich, 2014). At the same time, the incorporation of medical services into a capitalistic market represents a reorientation of medical care towards a profitable commodity, and actors within the medical sphere must employ strategies to balance their social values with the economic reality of medical work. For example, Roi Livne (2019) found that palliative care specialists moralize the expectation that they facilitate an "economized death" absent of expensive procedures by redefining a lack of medical intervention as a more peaceful way to die. Likewise, Adam Reich (2014) demonstrated that in their everyday work, healthcare professionals adopt specific behaviors that help them to connect their understanding of the purpose of medical care with the economic imperative to maximize

profit. In each of these cases, medical workers attempted to reconfigure their moral perspectives and/or medical practices to better match with an increasingly neoliberal medical market.

Reich's work is notable for the way that it sought to explicitly investigate not only situations where people successfully connect their economic and moral interests, but also instances where people live contradictory lives, "imperfectly [reconciling] their values with [market] forces out of their control" (Reich, 2014, p.10). This focus on imperfection enabled Reich to highlight that "bad matches" resulting from private medicine are often attributable to more than economic expectations of financial gain, spanning everything from the belief in healthcare as a right versus medical scarcity, to the dignity of medical encounters versus the marketing of medical luxury, to the tension between focusing on population health versus individual patients' medical needs. In documenting medical workers' largely failed attempts to alleviate economic and ethical contradictions in their professional lives, Reich revealed that "bad matches" make good cases for understanding moral economies.

The Importance of Context

Research also suggests that individuals' moral-market practices and understandings are shaped and restricted by the "rules, practices, and understandings" (Reich, 2014, p.8) that accompany their broader institutional contexts. While Livne (2019) illustrated that the idea of an "economized death" structures how palliative specialists practice medicine, he also specified that palliative doctors seek to avoid expensive medical procedures in part because economization is an institutionalized ideal of the broader palliative care profession. Reich (2014) made the related point that the initial moral frameworks upon which institutions are founded remain 1.) embedded within institutions through to the present day and 2.) relevant to institutional actors' moral-market activities even after institutions are integrated into the market.

Reich employed a historical perspective to demonstrate that the contradictions between social values and market realities, as well as responses to these contradictions, are context-dependent at both the meso and the micro level. Using three private, non-profit, California-based hospital case studies, which he terms PubliCare, HolyCare, and GroupCare, Reich established that healthcare organizations' overarching structures and moral frameworks are shaped by the social, political, and economic realities under which they developed, and that the modern-day moral economy contradictions experienced by institutions and institutional actors arise from conflict between these foundational ethical orientations and the development of a U.S. medical market characterized by privatization and profit:

1.) PubliCare was founded as a public almshouse in the late 19th century, functioned as a form of state-relief for poor communities, and initially idealized care as a right for indigent patients. Consequently, present-day practitioners at PubliCare, now a private hospital, continued to view care as a right, a perspective that contradicted the hospital's efforts to commodify medical services and the accompanying conceptualization of healthcare as a scarce resource.

2.) HolyCare was founded in the early 20th century as a private Catholic hospital, served mostly individuals able to pay for medical services, and attracted paying patients by idealizing healthcare as a moral vocation that reaffirmed patients' humanity. Modern-day HolyCare workers struggled to balance their moral understanding of care as a sacred encounter with the push to market medical services as a luxury product to compete in an increasingly profit-oriented medical sphere.

3.) Finally, GroupCare was founded during the United States' managed care era in the 1970's, was part of a push to serve middle-class patients through cost-efficient

standardization, and initially idealized reducing uncertainty in medical care. When attempting to balance economic efficiency with patients' medical needs, GroupCare providers confronted the tension between the medical interests of individual GroupCare members and the well-being of the broader GroupCare patient community.

In addition to revealing the role of institutions' foundational moral frameworks in current moral economy conflicts, Reich also highlighted that responses to market contradictions are rooted in existing organizational history, and that people are pushed into adopting imperfect strategies for correcting "bad matches" by market and institutional constraints on their behavior. PubliCare workers fought against commodification and medical scarcity by practicing individual, informal resourcefulness when resources were lacking, but consequently contributed to the hospital's inefficiency and financial instability. HolyCare staff channeled their spiritual view of dignified care into moralizing the sale of medicine as a luxury good. However, because this encouraged physicians to behave as entrepreneurs, it resulted in the prescription of unnecessary medical procedures. GroupCare sought to minimize market uncertainty through bureaucracy, standardization, and technology, which often led to the implicit rationing of medical services. In Reich's study, imperfect moral economy practices were shaped by institutional regulations and economic limitations, and no hospital was fully successful in connecting its moral ideals with market realities.

Although Reich (2016) examined the influence of patients' class status on hospital's foundational moral values, he was less interested in discussing how the social categories of medical practitioners (e.g. race, class, or gender) influence ethical considerations at an institutional or individual level. But social categories are an important aspect of moralized markets. As Zelizer (2012) points out, "the identity… of transactors [is a] crucial variation of

relational packages" (p. 151). To this end, while Reich noted that actors exist within already-moralized institutional worlds, he neglected to discuss that actors also exist within worlds that are already racialized, and gendered, and classed. In fact, in the United States, the medical profession itself was founded upon racist and sexist ideals, and scholars studying U.S. medicine from a multitude of disciplinary perspectives have uncovered a pattern of racist and sexist practices and beliefs among institutions and practitioners that continue into the modern day (Briggs, 2002; Fitzgerald & Hurst, 2017; Hobeman, 2012; Hoffman et al., 2016; Jagsi et al., 2016; Starr, 1982).

A related complication within the moralized-market school is that Reich and others have constructed moral-market theory through investigations centered in the metropole, with little acknowledgement of the potential pitfalls of this limited perspective. This is somewhat unsurprising; according to Raewyn Connell (2007), social theory created in the Global North often advertises universality despite being "built… on the experience of the most privileged 600 million people" (p. 212). However, if context is an integral part of how people understand and connect their economic lives and social values, then it is important to explore how moralized markets work within a colonial context, where the social, political, economic, and cultural realities of both institutions and individuals are formally and informally influenced by colonial powers.

Organizational and ideological ties between medicine in the Global South and colonial regimes make it an appropriate starting point for investigating moralized-markets in the periphery. Moreover, considering Reich's point that "bad matches" make good cases for understanding moral economy, the inherent moral economy conflicts ingrained in colonial and post-colonial Southern medicine are advantageous for expanding moral economy research. As

will be discussed in the next section, medicine in the Global South often develops under direct colonial rule, and foundational medical institutions and ideals are intended to further imperial aims rather than respond to local conditions. Medical values within this context are intrinsically contradictory, and generally incompatible with the market realities and healthcare needs of the Global South. The moral economy distortions that result from these circumstances are a useful starting point for expanding moral economy theory.

Medicine in the Periphery

Historical Roots: Colonization, Professionalization, and [Contradictory] Moral Frameworks

In both the metropole and the periphery, many early medical developments originate as part of the establishment of medicine as a profession, a process that helps to establish the norms, values, and practices surrounding medical care. Abbott (1991) theorizes that professionalization is characterized by a series of events, which include:

1.) Associations (in the form of clubs or other informal structures),
2.) Control of work (through licensing),
3.) Professional education (such as medical schools, internships, and residencies), and
4.) Pursuit of professional knowledge (knowledge of medicine being cultural capital that secures professional power) and profession-dominated work-sites (such as hospitals).

Scholars (Starr, 1982, Abbott, 1991, Friedson, 2001) see the professionalization process as culminating in occupational control, wherein physicians not only position themselves as the ultimate source of medical knowledge and authority, but also control access to professional legitimacy through standardized programs of education and licensing. However, research exploring medical development in colonized societies suggests that professionalization occurring

under colonial rule diverges from Abbott's proposed chain of events. Instead of local physicians establishing occupational control themselves, pathways to legitimate medical knowledge and authority in colonial societies are created and controlled by invading colonial powers. In the early 20th century Philippines, it was the U.S. government that set up and monitored licensing restrictions for local physicians looking to practice medicine, rather than Filipino physicians themselves (Anderson, 2006; Go, 2008). Lo (2002) notes that during its colonial occupation of Taiwan, Japan oversaw medical education on the island, as "the success of colonial medicine relied heavily on the existence of…well-trained, native [Taiwanese] agents" (p. 5). Similarly, Wendland (2010) writes that Malawi's first formal opportunities for medical education and licensing were regulated by European missionaries, and that as late as the 1920's there was no medical training program for Africans in East Africa.

These case studies reveal that in colonial societies, native physicians' opportunities for occupational control and professional autonomy are circumvented by the same colonizing forces that dominate their economies, governments, and cultures. Consequently, the medical institutions that accompany the professionalization process are founded not by local physicians, but by colonizing actors, and are often employed as tools of medical colonization, wherein colonial regimes use medicine and public health to subjugate local populations (Anderson, 2006; Go, 2008; Lo, 2002; Trujillo-Pagàn, 2013; Wendland, 2010). In Taiwan, the National Taiwan University College of Medicine[4] was founded by a colonial governor-general in 1897 to further what Japan described as "scientific colonialism", which sought to instill "modern civilization" in

[4] Originally called Taipei Hospital Medical Training Institute, the medical school was incorporated into Taipei Imperial University in 1928. Taipei Imperial University was renamed National Taiwan University in 1945 after the Japanese renounced sovereignty over Taiwan (NTU.edu).

Asia through medical services (Lo, 2002). Similarly, Queen Elizabeth Central Hospital in Malawi began its life as a segregated medical institution operated by the British government, which hoped that providing access to medical services would cement local reliance on the British regime and strengthen colonial power in the region (Wendland, 2010). In this way, the foundational moral frameworks of many contemporary medical institutions in the periphery are based in colonial ideologies that 1.) cast native populations as inferior to, and dependent on, colonial entities, and 2.) characterize medicine as the best tool for civilizing an uncivilized populace and modernizing an antiquated society.

What's more, the broader biomedicine into which periphery doctors are professionalized has been described by scholars as an "inherently colonizing… enterprise" (Wendland, 2010, p.13). Biomedicine privileges the colonial over the indigenous, constructing doctors as White and positioning itself as a Western export to the rest of the world (Anderson, 2003; Lo, 2005; Wendland, 2010). As a result, physicians in the Global South operate within a medical field that denies them complete ownership over their own medical expertise and disputes their professional legitimacy. This is not to say that native doctors do not benefit from the increased status that follows professionalization, or that they are passive victims in imperial schemes. To the contrary, they regularly enjoy prestigious positions within colonial regimes, and actively participate in medical colonialism. However, as Trujillo-Pagán (2013) asserts, even when local doctors attempt to elevate their social rank and professional power by taking part in empire-building efforts, colonial forces continue to classify them as inferior to foreign imperial agents. Filipino physicians supported the imperialistic push to bring hygiene in the Philippines up to "American standards" by working for the Bureau of Health (Anderson, 2006; Go, 2008). As junior sanitation officers, they were charged with enforcing racialized public health measures that

strategically disrupted local social networks and customs. Nevertheless, even after Filipino doctors were "groomed" by American administrators to occupy senior positions in the Bureau, most U.S. officials continued to view them as poor imitations of their superior American counterparts (Anderson, 2006). Physicians in the Global South occupy an untenable position with regards to upholding the foundational Western, White ideals of the doctoral profession. Even if they strictly adhere to biomedical principles of health and disease, their race, ethnicity, and geographical location prohibit them from fully embodying the imperialistic expectations of their field.

Despite the clear limitations on native physicians' power to shape early medical development in their communities, Julian Go (2016) contends that medicine in the periphery is "mutually constitutive", made up of contributions by both the colonizer and colonized. In fact, local physicians in early colonial societies often used their newfound power to challenge colonial influence. Lo (2002) writes that Taiwanese doctors opposed the Japanese state both indirectly, such as when they recorded injuries caused by police, and directly, such as when they criticized the state's response to disease outbreaks. In the Philippines, local doctors repeatedly pushed to adjust sanitation measures so that they would better fit with Filipino customs (Anderson, 2006). However, even when native physicians capitalized on their newfound status, their power in colonial societies was subordinate to that of invading colonial forces. After promoting Filipino doctors within the Bureau of Health, U.S. officials continued to refuse recommendations by local doctors regarding sanitation rules (Anderson 2006). Likewise, while physicians in Taiwan made gains in professional autonomy under Japanese rule, the scope of these gains was contingent on approval by the Japanese state (Lo, 2002). Native physicians may successfully negotiate greater power or status within colonial regimes, but ultimately medical professionalization and medical

development that occurs under colonial rule serves to reinforce existing colonial power structures.

Native doctors are pushed to professionalize by embracing the early colonial medical project, investing in the idealization of metropole-centric biomedical superiority. However, doing so does not protect them from being treated as inferior to metropole physicians due to their race and ethnicity. As seen in Japan and Taiwan (Anderson, 2006; Lo, 2002), local physicians can attempt to eschew the colonial medical project and pursue a vision of medicine more in line with local conditions. Unfortunately, doctors' ability to resist colonial medicine and meaningfully transform periphery medical development and values is limited by the political and professional domination of invading colonial forces. The impact of early colonization on medical development in the periphery shapes the moral universe from which doctors in the Global South can draw from when envisioning postcolonial medical reforms and constructing postcolonial medical practice, rooting medical values in biomedicine, Whiteness, and the Global North.

Postcolonial Implications: Medicine and Moralized Economy in the Global South

Following World War 2, many of the colonial regimes under which early periphery medical development occurred were dismantled. Nonetheless, in a "postcolonial" world, direct colonial control has been replaced by indirect influence centered around economic dependency and biomedical hegemony, and metropole forces continue to hinder medicine in the Global South from effectively responding to local conditions. Western-dominated international organizations like the United Nations, the International Monetary Fund, and the World Health Organization encourage economic networks, cultural trends, and social and political developments that reinforce global metropole domination, bolstering the influence of Western biomedicine and contributing to high rates of poverty and poor health in the periphery (Bockman, 2015; Ekeocha,

2018; Nkrumah & Mkrumah, 1965; Rao 2000; Uzoigwe, 2019). Moreover, even after achieving independence, most former colonies retain neocolonial relationships to Northern colonizers that complicate their capacity to cultivate medical and economic resources and limit their control over local healthcare policy (Igene, 2008; Packard, 2000; Stuckler, 2008). The chronic impoverishment of periphery inhabitants indicates that a sociomedical approach to medical care centered around resolving interrelated social and medical problems could better meet the basic healthcare needs of periphery populations than a biomedical approach divorced from social considerations and dependent on expensive medical technology. However, the post-colonial economic and medical dependence of the Global South on metropole support, and the accompanying hegemonic dominance of biomedicine, diminish the capacity of periphery countries to implement counter-hegemonic, sociomedical healthcare systems that are both effective and economically solvent.

The enduring system of global neo-imperialism and the Western-centric-White-supremacy underlying medical practice mean that present-day periphery doctors attempting to "live connected lives" (Reich, 2014, p. 9) confront postcolonial iterations of early moral economy contradictions. Just as under direct colonial rule, native physicians face devaluation compared to White doctors and professional disempowerment as the hegemonic imperative of biomedical practice clashes with the Global South's lack of medical and financial resources. Southern doctors often work for lower pay than their Northern counterparts, practicing within medical systems that are underfunded, understaffed, and under-resourced. Under these circumstances, periphery physicians struggle to provide their patients with the kind of Western-style biomedical treatment that will protect doctors' professional legitimacy, let alone perform the "relational work" involved in ensuring economic efficiency. Furthermore, while most

physicians strive to balance the moral ideal that medicine is a social good with the market reality that medicine is a profitable commodity, the “civilizing” goals and biomedical focus of medical colonialism mean that doctors in the periphery are also likely to see expensive, technologically-heavy biomedicine as an essential tool for modernizing their “developing” homelands, and to view biomedical practice as a moral obligation to their fellow countrymen. Just as countries in the postcolonial Global South are impeded from implementing community-centered healthcare policies by neocolonial relationships, economic dependence, and biomedical hegemony, physicians in the periphery are pushed into supporting costly biomedical practices, and end up marginalizing sociomedical, public health projects better suited for sustainably meeting the healthcare needs of Southern populations. Moreover, in conceptualizing biomedicine as a mechanism for improving the prominence of non-Western societies, doctors in the Global South reinforce the assumed inferiority of their own communities, and of themselves as members of those communities.

Some periphery physicians may seek employment in the Global North as a way of assuaging the racialized professional inequality that persists in the postcolonial era, accessing better pay, more prestigious biomedical opportunities, or a higher quality of life for themselves and their families. However, while physicians who move to the resource-rich metropole escape the “bad match” resulting from imperially-influenced biomedical idealization and lack of resources, migration presents its own set of moral economy challenges. First, relocation reasserts imperial patterns that devalue Southern doctors and Southern medicine. Physicians who move to the metropole often face professional hurdles, including supplementary coursework and additional years of residency, that designate periphery medical training as insufficient, subtly formalizing Southern doctors’ professional illegitimacy and the “inferiority” of Southern

medicine. Even after completing these professional requirements, periphery doctors practicing in the Global North may still be subject to racialized discrimination from both patients and co-workers that can affect their everyday practice and hinder their ability to access broader professional opportunities. Second, while doctors who migrate to the Global North may achieve greater professional prominence, they do so while leaving behind struggling communities to which they have strong personal ties and a sense of professional duty. Consequently, migrating Southern physicians face tension between their improved professional and financial standing and their ethical obligation to their communities and countries of origin.

Regardless of where they ultimately engage in medical practice, doctors hailing from the Global South are tasked with negotiating the incongruous medical values, ongoing medical scarcity, and racialized professional devaluation endemic to colonial contexts. On the one hand, the "civilizing" colonial origins of professional biomedicine, and periphery doctors' own ties to the Global South, encourage physicians' to dedicate their lives to economically-strapped regions lacking in biomedical resources. On the other, periphery doctors' tenuous grasp on professional legitimacy as non-Western, non-White physicians incentivizes them to stringently align themselves with the Global North, and steadfastly ascribe to Western biomedical standards.

[Colonized] Professional Identities: Making Sense of Moral-Market Tensions and Constructing "Relational Packages"

Adam Reich (2016) and Roi Livne (2019) explain that medical institutions draw upon cultural values to inform and justify profit-oriented behaviors, and that organizational contexts, including foundational values, bureaucratic regulations, and market constraints, impact the "relational packages" through which physicians understand and construct their professional lives. However, it's worth noting that while individuals' sense-making schema around moral economy

and institutionalized values may be similar to their affiliated institutions, it may also be different. This is especially likely to happen if individuals hail from minority social groups or periphery contexts, as their gendered, racialized, or other marginalized experiences can prompt them to see moral economy contradictions distinctly, and feel moral economy tensions more acutely, than organizations. Non-professional identifiers impact the way that individuals relate to, understand, and move through institutions. How might being a non-White physician shift how you understand your role within a medical organization founded to employ only White doctors, or a hospital that caters to White patients? How might your minority status influence the way you respond to moral market tensions, since institutional rule-bending aimed at "connecting" your social values and economic life could put you at risk of being viewed as un-professional in ways less likely to affect your majority counterparts?

Theory and research centering periphery and non-White professional indicates that doctors' professional identities can tell us more about how they experience and make sense of moral economy contradictions, providing added insight into the negotiated meanings underlying their "relational packages" and subsequent "relational work." Professional identity broadly refers to how people understand themselves within a professional context, and encompasses the "attitudes, values, knowledge, beliefs, and skills shared… within a professional group" (Abbott, 1988; Adams, Hean, Sturgis & Clark, 2006, p. 56). While some scholars have suggested that professional identity can subordinate the roles that individuals embody outside of work (Adams et al., 2006; Cohen, 1981), Lo (2005) contends instead that professionals are socially embedded, with their professional identities shaped not only by the ideals of their profession but also by their social histories and categories of belonging. Furthermore, she argues that while professional and social categories of identity are mutually constitutive, they are often in conflict; the

collective identities of many professions' as White and male complicates the inclusion of individuals who fall outside of these social bounds.

The discord that Lo identifies between social categories and professional identities mirrors the competing ideals periphery physicians confront when grappling with questions of moralized economy. Through her investigation of medical residents in Malawi, Wendland (2010) observed the practical consequence of this connection; when periphery doctors' aspirations of "healing modernity" through biomedical work are foiled by local impoverishment and lack of resources, they respond in part by reevaluating their professional roles. Wendland found that physicians in Malawi retained a powerful connection to Northern professional expectations and biomedical hegemony rooted in a Southeastern African history of colonization, which informed their medical education, pushed them to seek training opportunities in the Global North, and led to envious comparisons between themselves and foreign doctors. However, when confronted with the harsh reality of practicing medicine within an atmosphere of medical scarcity, Malawian physicians elevated the importance of creating an emotional, community-oriented connection to their Malawian patients, redefining their professional identities as centered around having "a heart for the people". When doctors in Malawi found themselves unable to offer their patients "ideal" biomedical care, they moralized their use of dated technology and treatment options by leaning on their reconfigured role as emotionally-invested national physicians. Wendland's findings indicate that periphery-based physicians draw upon patriotic professional identities to make sense of tension between the costly expectations of biomedical hegemony and the reality of resource-poor Southern medical markets, conceptualizing their professional lives as community-centered nationalistic endeavors and implementing community-oriented care in response to moral market contradictions.

Periphery physicians working in the Global South spend their days actively serving native patients and directly contributing to their native medical arenas within colonial contexts that foundationally idealize medical work as a tool for modern progress, which helps to explain why they develop a patriotic professional identity and a nationalistic understanding of their professional work. In contrast, native doctors that move to the metropole lack daily opportunities to serve their Southern communities, and must grapple with having absconded from their professional obligation to their homelands in search of professional and economic advancement. Moving to the Global North likely hinders periphery physicians' ability to integrate nationalism into their professional self-concepts, as patriotic community service is an inappropriate sense-making schema for responding to the moral market tensions associated with leaving their homelands. While research on the professional identities of Southern doctors working in the Global North is lacking, scholarship focusing more broadly non-White professionals in the United States provides insight into the potential sense-making of periphery physicians in the metropole. These studies indicate that although unlikely to conceptualize their professional lives as nationalistic enterprises, Northern-based periphery doctors may still work to integrate their ethnic backgrounds into their professional identities, and engage in community-oriented responses to moral-market conflicts.

Vallejo (2012) found that Mexican American professionals struggle to balance their professional achievements, which allow them to leave their ethnic enclaves and move into middle-class White neighborhoods, with their stigmatized ethnic backgrounds and continued sense of duty to their struggling minority communities. She observed that Mexican American professionals deal with these contradictions by fostering professional identities that incorporate their ethnic origins as beneficial professional tools, and focus their professional ethos in part on

how mainstream professional success allows them to help the broader Mexican American community. Mexican American professionals in Vallejo's study put their professional self-concepts into practice by participating in Latino/a professional associations that provided them opportunities to "[gain] business skills, networking opportunities, and social support" from co-ethnics in the face of work-place discrimination, and used their improved financial positions to "[influence] the lives of the collective [Mexican American] community" through co-ethnic mentoring and other philanthropic endeavors (Vallejo, 2012, p. 146-147). In this way, Mexican American professionals' ethnic backgrounds were redefined as a professional advantageous, and professional success and departure from ethnic enclaves was re-appropriated as a mechanism for community action.

Watkins-Hayes (2009) found that Black and Latino welfare workers also experience tension between their professional gains, "the subordination inherent in their historically disadvantaged status" (p. 292), and their commitment to helping co-ethnic welfare recipients. In order to balance these considerations, the Black and Latino case managers Watkins-Hayes observed deliberately incorporated their racial backgrounds into their professional identities, "integrating race into their understanding of their work" (p. 287). Watkins-Hayes (2009) explains that Black and Latino welfare workers see their status as co-ethnic community insiders as a professional asset to connecting with clients, and combine their ethnic cultural capital with their professional knowledge of welfare bureaucracy to find ways of helping non-White welfare recipients. Similarly, Slay and Smith (2011) found that while Black journalists recognize that their race is associated with negative stereotypes and discrimination, they redefine their stigmatized racial backgrounds in positive professional terms, casting their race as offering a unique journalistic perspective superior to their White counterparts.

Like minority professionals in the United States, Southern physicians that move to the metropole may find meaning in connecting their professional identities to their ethnicities even after leaving their homelands, and are likely to continue engaging in community-focused responses to moral-market conflicts. While they will not view their professional lives as patriotic offerings, migrant periphery doctors might still seek to relieve the tension between their professional progress in the metropole and the continued suffering of patients, friends, and family in their homeland by using the unique professional advantages that accompany working in the Global North to give back to their native Southern communities. Moreover, periphery doctors working in the metropole may make sense of their marginalized ties to the Global South by conceptualizing their ethnic backgrounds as an advantageous tool for serving their new community of patients, protecting their professional status from the inherent stigma associated with their non-White origins and Southern medical training and retaining an element of community service to their professional work.

Wendland, Vallejo, Watkins-Hayes, and Slay and Smith illustrate that broadly, individuals existing outside of their professions' "ideal" confront the elevated moral-market tensions that arise from their stigmatized, extra-professional social categories in part by reconfiguring their professional roles to better incorporate their marginalized backgrounds. However, their findings also indicate that Northern and Southern-based periphery doctors may differentially integrate their ethnic origins into their professional self-concepts, disparately make sense of the unique moral market tensions associated with their geographic contexts, and divergently deploy their professional identities to inform community-oriented "relational work." Physicians in the periphery are more likely to see themselves as patriotic medical workers dedicated to serving their homeland communities, and will seek to resolve the contradiction

between biomedical hegemony and the medical scarcity of their Southern contexts through community-centered healthcare strategies. In contrast, doctors in the Global North who achieve professional mobility but are unable to directly participate in collective medical efforts in their native homeland may see their ethnic backgrounds as a useful tool for serving a new community of metropole patients, and may utilize their Northern-based professional success to give back to their native communities from afar.

Puerto Rico as a Colonial Case Study

Puerto Rico's longstanding colonial context, and the well-documented relationship between healthcare on the island and Spanish and United States imperialism, make its medical field an appropriate case study for exploring moralized economy in the Global South (Briggs, 2002; Go, 2008; Mulligan, 2014; Rigau-Pérez , 2013; Trujillo-Pagán, 2013). Puerto Rico was colonized by Spain between the 16th and 19th centuries, and subjected to United States colonial rule following the Spanish-American War in 1898. However, like other periphery countries, Puerto Rico was formally "decolonized" after World War 2, when the U.S. Congress approved a 1952 Puerto Rican constitution that declared the island a United States commonwealth[5]. Despite this change in political status, scholars, activists, and politicians on and off the island agree that Puerto Rico retains both neocolonial and direct colonial ties to the United States (Cabán, 2018; Duany & Pantojas-Garcia, 2005; Malavet, 2004; Trías Monge, 1997, UN.org).

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[5] Puerto Rico was designated an unincorporated territory, or "commonwealth", of the United States by the Puerto Rico Federal Relations Act (PL 600) of 1950. However, the term "commonwealth" has no direct Spanish equivalent. In Spanish documents, "commonwealth" is translated as "Estado Libre Asociado," which directly translated to "Free Associated State." This ambiguous language reflects the island's ill-defined political position, but does not negate the colonial relationship between the island and mainland (Issacharoff et al., 2019)

As a commonwealth, Puerto Rico is required to abide by United States federal law. However, the island lacks meaningful democratic representation at the federal level. Puerto Rican residents cannot vote for president, and their congressional representative can speak, but not vote, on federal policy. Moreover, just as the economies of present-day periphery countries are hampered by global neocolonial economic conditions (Bhambra, 2020), Puerto Rico's economy is debilitated by U.S. federal regulations that deny it the ability to set its own tariffs and make international commercial treaties. Commerce in the commonwealth is vulnerable to competition from better-established United States and international corporations, but the island has little recourse for economic transformation, and the ensuing high poverty rate is exacerbated by the continuation of colonial-era economic policies. For example, the 1920 Jones Act, which remains in effect today, requires that products brought to Puerto Rico from the United States arrive via expensive, U.S.-built, owned, crewed, and operated ships, raising the price of goods on the island (Issacharoff et al., 2019; Rivero, 2018).

Of course, unlike many former colonies in the Global South, Puerto Rico is considered part of the United States. The 3.1 million Puerto Ricans living on the island are United States citizens, and hold American passports. Puerto Ricans can move freely between the island and mainland, with mainland Puerto Rican residents granted the same voting rights as any other state-side citizen. Furthermore, Puerto Rico has achieved a measure of local self-governance. Commonwealth officials are democratically elected rather than federally appointed, and much like U.S. states, the island can enact commonwealth-level laws and policies so long as they adhere to federal regulations. However, the 2016 PROMESA legislation passed under President Obama in response to the island's fiscal crisis has challenged this façade of local independence, granting a presidentially-appointed fiscal oversight board power over commonwealth policy

(Cabán, 2018). Like other former colonies in the periphery, “decolonization” in Puerto Rico has recreated colonial and neocolonial patterns.

Medicine in Puerto Rico also epitomizes many of the characteristics common among the past and present medical contexts of the Global South. Medical colonialism was a central tenet of both Spanish and early American colonial strategies on the island, and medical professionalization and its accompanying cultural, institutional, and technological developments in Puerto Rico took place through the Unites States colonial regime, with Puerto Rican physicians systematically relegated to lesser positions during the professionalization process (Go, 2008; Trujillo-Pagán, 2013). Like many Northern-dependent, economically-strapped countries in the post-colonial Global South, Puerto Rico’s subordinate relationship to United States federal law, and its reliance on U.S. federal funding, have influenced healthcare policy on the island (Mulligan, 2014). Furthermore, the island’s present-day healthcare crisis reveals that like its periphery counterparts, Puerto Rico struggles to provide for the healthcare needs of its population.

Despite these similarities, Puerto Rico’s status as a United States commonwealth places Puerto Rican medical workers in a somewhat unique position compared to doctors in other parts of the periphery. Because medical education in Puerto Rico is accredited by U.S. institutions, medical practice on the island is subject to U.S.-mandated standards, and Puerto Rican physicians are United States citizens, Puerto Rican doctors operate under the globally-respected canopy of U.S. biomedicine, and can move to the mainland without undergoing the strenuous recertification process required of international physicians[6]. However, Puerto Rico’s close ties to

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[6] Puerto Rican doctors that have gone through an accredited medical school, residency, and passed their Board Exams on the island go through the same medical license-transferring process as mainland physicians moving from one state to another.

the United States do not shield Puerto Rican doctors from the resource-poor medical environment on the island, nor do they assuage potential feelings of community abandonment for physicians that move to the mainland. Furthermore, citizenship does not protect Puerto Rican physicians from the racism, discrimination and stigma U.S. medicine and U.S. patients hold for Caribbean medical practice and training. Puerto Rican physicians on and off the island are likely to struggle with competing social categories as their Puerto Rican origins clash with the White, biomedical ideals of the United States' medical field. These tensions may be further exacerbated for doctors practicing in Puerto Rico's sparely-stocked medical field, as physician's professional status may be threatened by their inability to treat patients using expensive biomedical techniques. Despite Puerto Rico's close political relationship to the United States, Puerto Rican medicine, and Puerto Rican medical workers, confront many of the same moral economy challenges as in other parts of the Global South.

Chapter Overview

This study uses the Puerto Rican medical case to investigate moral economy within a colonial context, and seeks to better understand 1.) how contradictions between medical values and medical markets develop in the Global South and 2.) how these contradictions are experienced, understood, and responded to by colonized actors at both an individual and an institutional level.

Chapters 2 and 3 examine the history of medical development in Puerto Rico from a moralized economy perspective. Chapter 2 investigates the origins of Puerto Rico's medical values through the Spanish (1493-1898) and early United States (1898-1947) colonial eras, during which medical professionalization occurred and many of the island's medical institutions were founded. I illustrate that in both periods, the mutually constitutive effects of medical

colonization, Puerto Rico's socioeconomic context, and the interests of Puerto Rican physicians resulted in the centralization of medical services within the colonial government and the conceptualization of biomedicine as a modernizing tool for the island. Furthermore, I highlight how the racist and imperialistic goals underlying Puerto Rico's U.S.-controlled professionalization process constructed Puerto Rican medicine, and Puerto Rican physicians, as subordinate to and dependent on their American counterparts. I argue that these developments culminated in medicine on the island internalizing a contradictory set of social values, including state responsibility for guaranteeing healthcare access, a preference for biomedical treatment, and an ongoing professional tension between medical work as a patriotic duty to Puerto Rico and medical legitimacy as reliant on American medicine.

Chapter 3 covers Puerto Rico's institutional-level "relational work", exploring the island's Commonwealth Era efforts to create medical policy and construct medical institutions that balanced these early contradictory medical values with the economic, political, and medical restrictions accompanying its continued colonial relationship to the United States. I explain that during this period, Puerto Rico organized healthcare under three unique healthcare systems, each of which represented an attempted institutional solution for matching the medical ideal of healthcare as a government-guaranteed human right, native doctors' belief in American-style biomedical superiority, federal economic restrictions that encouraged economic dependence on the mainland, and U.S. political control over local affairs that limited options for healthcare provision. First, Puerto Rico's commonwealth government instituted SocialCare, a universally accessible, regional healthcare system that defined "quality" care as economical, preventative, and sociomedical. Later, the SocialCare model was dismantled by the combined efforts of native Puerto Rican physicians seeking improved financial and professional prospects and federally

mandated Medicaid and Medicare legislation that encouraged privatization and increased use of biomedical treatment. The ensuing BioCare model defined "quality" care as broad access to publicly-funded, privately-administered, costly biomedical treatment, but proved unsustainable as elevated expenses clashed with public monetary shortages resulting from inequitable federal financing for Medicaid and Medicare compared to U.S. states, an imperially weakened economy, and the island's large, public-money-dependent indigent population. Finally, the 1990's saw Puerto Rico's government replace BioCare with GroupCare Pueblo, a healthcare model that sought to achieve universal healthcare by providing patients with state-funded medical assistance through private, for-profit HMO's. GroupCare Pueblo was moralized by defining "quality" care as publicly-funded, privately-provided, economically-preventative, broadly accessibly, and neoliberally-managed. However, combined with Puerto Rico's economic instability, lack of federal healthcare funding, and close ties to U.S. medicine, GroupCare Pueblo led to a healthcare crisis characterized by care-rationing, resource shortages, the movement of native doctors to the United States, and increased healthcare costs through administrative and profit expenses. I conclude that the failure of SocialCare, BioCare, and GroupCare Pueblo to sustainably provide care to the island's population indicates that Puerto Rico's colonially-influenced, contradictory medical ideals of state-sponsored universal healthcare and biomedical superiority are incompatible with the economic and political limitations accompanying its colonial context.

Drawing from interviews with Puerto Rican physicians on and off the island, Chapters 4 and 5 cover how doctors understand, respond to, and moralize their responses to the island's healthcare crisis, connecting the moral frameworks, medical institutions, and colonial relations demarcated in Chapters 2 and 3 with present-day medical practice. Chapter 4 examines Puerto Rican doctors' professional identities as a way of uncovering the sense-making schema

underlying their "relational packages." I investigate how Puerto Rican physicians' construct professional self-concepts that help them navigate contradictions between the institutional constraints of the Reforma System, the hegemonic influence of the United States' medical machine, the island's economic crisis and healthcare shortages, and their ethical commitment to broadly accessible biomedicine. Both mainland and island-based doctors expressed unease with what they described as medically irresponsible profiteering by Reforma insurance companies, and revealed professional identity tensions around Puerto Rico's low pay, lack of research opportunities, and reliance on dated medical technology when compared to the medical abundance of the mainland. To reconcile to these moral economy and identity conflicts, physicians' drew from Puerto Rico's foundational moral framework, associating "quality" care and medical prestige with American medicine while also emphasizing the importance of creative approaches to ensuring patients' biomedical access. Doctors in Puerto Rico presented themselves as medical heroes for "doing more with less" and protecting native patients' health against profit-oriented insurance companies and self-interested governments. Moreover, physicians on both sides of the Caribbean described their crisis-laden Puerto Rican medical experience as making them more inventive, and therefore superior, to their U.S. counterparts. Physicians' identity narratives were interrupted when the social impacts of Puerto Rico's economic crisis rendered them unable to fulfill their biomedical duty to their patients, highlighting both the incompatibility of Puerto Rico's colonially-influenced commitment to costly biomedicine with the limitations inherent in its colonial medical market and the need for a sociomedical approach to island health.

Chapter 5 discusses how Puerto Rican doctors' put their professional identities into practice, investigating the "relational package" through which they inform and interpret their responses to the island's medical situation. Physicians on and off the island engage in socially-

embedded, redistributive, community solutions to the healthcare crisis that seek to balance their commitment to U.S.-style biomedicine and perceived responsibility to "heal" Puerto Rico with the limits of their respective medical markets and social contexts. Island-based physicians described their medical work as a patriotic duty to Puerto Rico, and participated in community-centric, reallocative efforts to improve patients' biomedical access, including boundary-crossing within the healthcare system, compensating and improvising, and subsidizing the Reforma system with their own resources. Doctors working in Puerto Rico drew from their identities as innovative medical professionals, and their faith that the Puerto Rican medical community could "do more with less," to express confidence around these methods. However, because their resource-poor island context resulted in a tenuous grasp on American-style professional legitimacy, island-based doctors struggled to articulate the limited efficacy of their efforts. In contrast, U.S.-based physicians whose professional status had been boosted by the mainland's prestigious medical sphere more openly acknowledged the shortcomings of doctors' efforts, and moralized leaving struggling patients and *patría*[7] for professional success by engaging in their own redistributive community strategies for fulfilling their commitment to Puerto Rico that reflected their U.S. context. First, they shared Puerto Rico's warm culture and medical flexibility, which they defined as a scarce resource in the U.S., with their mainland patients. Second, despite declining to couch their professional lives in nationalistic terms, physicians on the mainland redistributed the biomedical skills and resources they gained in the United States with doctors and patient son the island. I conclude that Puerto Rican doctors' narratives reveal that the island's neoliberal Reforma System, initially touted as an efficient, business-like approach to care, balances precariously on an informal trans-Caribbean community network of

[7] *Patría*. Homeland.

everyday medical workers, and that Puerto Rican physicians' commitment to biomedicine constitutes an authentic foundation for executing their vision of "healing" the island.

Methods

This dissertation pulls from primary historical accounts, secondary sources, and ethnographic interviews with Puerto Rican physicians on and off the island. Findings in Chapters 2 and 3 are based predominantly on evidence drawn from newspaper articles and scholarly investigations of Puerto Rican history and Puerto Rican medical development; because most of my research was conducted from Texas, I had limited access to libraries and databases that might have allowed greater inclusion of primary sources. Despite this geographic limitation, I incorporated several primary accounts into my analysis. For Chapter 2, I reviewed the 1894 novel *La Charca* by Puerto Rican physician Manuel Zeno Gandía, which, as noted by other scholars (Rodríguez-Silva , 2012; Trujillo-Pagán, 2013), provides insight into the intersection of medicine, patriotism, race, class, and industrial modernization on the island under Spanish rule. I also referenced the autobiography of Dr. Bailey K. Ashford (1934), the architect of the early-20th century Hookworm Campaign that served as a cornerstone of U.S. medical colonialism in Puerto Rico. In Chapter 3, my investigation of the island's mid-20th century Regional System relied in part on a monograph co-written by Dr. Guillermo Arbona (Arbona & Ramírez De Arellano, 1978), Puerto Rico's Secretary of Health during planning and implementation of regionalization (1957-1966). While this account of Puerto Rico's experience with regionalization is framed as a scholarly public health case study, it includes Dr. Arbona's first-hand descriptions of the regionalization process. Moreover, many of the newspaper articles I referenced in Chapter 3 included primary accounts from government officials, island doctors, and Puerto Rican patients.

I approached both my historical and interview data through abductive analysis, seeking to "develop novel theoretical insights" by chronicling "surprising observations" (Timmermans & Tavory, 2012, p. 169) and good and bad matches between my empirical findings and existing theory. In addition, I purposefully drew from a wide array of secondary sources across a multitude of different disciplines, including history, law, economics, anthropology, and sociology, ensuring that my historical evidence came from diverse scholarly perspectives with unique theoretical backgrounds. Furthermore, I carefully selected articles and books from both U.S. mainland authors and Puerto Rican scholars. In doing so, I was able to incorporate Spanish-language investigations by Puerto Rican academics sometimes excluded from English-language explorations of the island, adhering to Raewynn Connell's appeal that sociological scholarship move towards Southern Theory, deliberately deconstructing the "metropolitan dominance of social science" (p. 232) by creating transnational "links between intellectual works beyond one's immediate region" (p.229).

Chapters 4 and 5 were based on 37 semi-structured ethnographic interviews with Puerto Rican physicians on and off the island, all of which took place between November of 2017 and May of 2018. Fourteen of these interviews, five in Texas and nine in Puerto Rico, were conducted in-person, usually at physicians' work-places. In-person interviews were often accompanied by short tours of the hospital/clinic premises, which allowed me to directly compare healthcare facilities in Puerto Rico and the United States and more thoroughly understand medical resource disparities between the island and mainland. The remainder of the interviews (24) took place over the phone. I allowed physicians choose the language (English or Spanish) in which interviews were conducted before the interview began. While most chose Spanish, physicians living in the United States were more likely to respond to my inquiries in

English. However, interviews would often switch between the two languages as physicians matched their vocabulary to what they were trying to describe.

Initially, participants were recruited using emails collected from their personal and professional websites, or via Facebook Messenger if their clinic had a social media presence. However, after completing the first few interviews, I was able to recruit the remainder of study participants through snowball sampling. The close connections that physicians maintained with doctors on either side of the mainland-island divide meant that doctors in Puerto Rico were often able to introduce me to physicians on the mainland, and vice-versa. Referrals helped to engender trust during interviews, and my sampling method also allowed greater insight into how Puerto Rican physicians cultivate and call upon cross-border professional networks. Interviews were recorded, transcribed, and analyzed using Dedoose.

All participants were physicians born and raised in Puerto Rico, and had attended the University of Puerto Rico School of Medicine (UPR) in Rio Piedras. While there are four medical schools on the island, UPR is the oldest, largest, and best established. Furthermore, it is the only public medical school on the island, and its historical connections to the United States colonial regime, the Puerto Rican Commonwealth Government, and the broader island healthcare system meant that institutional through-lines from the colonial period to the present day were more clearly represented in doctor's narratives.

Twenty participants were what I refer to as "island-based," which meant that they were working and living in Puerto Rico at the time of our interview. Many studies on Puerto Rico, and especially on medicine in Puerto Rico, limit their investigations to the San Juan metro-area, where medical infrastructure and healthcare services are more plentiful. In order to provide a more representative sample, I spoke with physicians across the island, including smaller towns

and cities. Island-based physicians came from a variety of medical disciplines, but were less likely to have a subspecialty, or have completed a post-residency fellowship, than doctors on the mainland, reflecting the dearth of medical specialists on the island (Respaut, 2016). Five island-based physicians had lived for some period of time on the mainland. Two doctors described having received their undergraduate education in the United States before returning to Puerto Rico for medical school. Three went to the mainland as part of their medical training, one for residency and the other two for specialized fellowships and a few years of post-training professional work. These cases reflect the frequency with which Puerto Ricans move back and forth between island and mainland in search of educational and professional opportunities (Aranda, 2007; Perriera et al., 2017).

Seventeen participants were mainland-based, which meant that they had left the island after 2009 and were working and living on the United States mainland at the time of our interview. While Puerto Rico's healthcare crisis has been a slow-developing process, it was particularly exacerbated by declining economic prosperity during the Great Recession, and doctors that left the island after 2009 were part of a growing wave of medical exodus. Mainland-based doctors tended to be earlier in their careers than their island-based counterparts, perhaps because leaving less-established professional trajectories on the island meant that moving to the mainland had less professional risk. Eleven of the mainland-based doctors I spoke with had completed residencies or fellowships in the United States. In fact, five of these eleven doctors chose to stay in the United States directly following their fellowships. The remaining six, all at more advanced stages of their careers, returned to the island for some period of time before moving back to the mainland. Mainland-based physicians mostly hailed from areas in the United States known for attracting Puerto Rican populations during this most recent migration wave,

including Florida and Texas, although a few were settled in areas with copious medical infrastructure but little Puerto Rican, or even Latino, community presence.

I began interviewing doctors only a few months after Hurricane Maria, which had immense impacts on the island's medical infrastructure, as well as individuals' personal and professional lives. My interviews with doctors on and off the island pointedly asked them to talk about the development of the healthcare crisis, and physicians' experiences throughout this development, including their experiences during and after Hurricane Maria. When physicians' spoke about Hurricane Maria, the theme that continued to emerge was not that the storm had drastically altered their professional trajectories, or the trajectory of the island's healthcare sector, but that it had "lifted the veil" and revealed the depth of already existing problems. As one island-based physicians explained, "When Hurricane Maria took the leaves from the trees, it uncovered the reality of our situation." For doctors, Hurricane Maria and its after-effects were not the cause of their professional difficulties, but rather a catalyst for more clearly defining the problems besetting the island's healthcare sector. I do not mean to minimize the importance of Hurricane Maria for the island, or for the doctor's I spoke with, but it was my sense that in some ways Hurricane Maria allowed doctors to speak more freely about their professional lives, and the island's broader healthcare situation.

I am the daughter of Puerto Rican immigrants, and despite spending most Christmases on the island with my cousins and grandparents, I grew up in Austin, TX. This was something that came up often in my conversations with doctors, who wanted to know where I was from, and how I knew Spanish, and why I was interested in this topic. In some ways, my background was very helpful in establishing rapport with participants. Doctors were delighted that despite having been raised in the United States, I had developed a distinctly Puerto Rican twang when speaking

in Spanish. When I explained that my grandfather had been a doctor on the island, and that I had been inspired to pursue my dissertation work on Puerto Rico after watching the store-fronts in the plaza of my parents' hometown grow progressively more abandoned, physicians expressed pride that I was interested in understanding and telling the story of healthcare in my homeland. Doctors in the United States often asked me how my parents had kept me so connected with the island, hoping to implement similar strategies with their children.

However in other instances, my background was a limitation. At times, doctors seemed careful in the way that they described Puerto Rico's relationship to the United States, especially if they were leaning towards a more critical assessment. While follow-up questions usually resulted in more open conversation around this topic, I wondered if physicians were anxious about openly criticizing the United States to a Puerto Rican from the mainland. There were also clear limits to my cultural capital. For example, early recruitment and interview materials used the word "migration" when describing doctors moving from Puerto Rico to the mainland. While some doctors considered themselves, or other Puerto Ricans who had moved to the United States, "immigrants," many were eager to distance themselves from this categorization. Most were adamant that coming to the mainland from Puerto Rico was identical to relocating from one state to another, with one explaining that it was like "moving from Texas to Oklahoma." After my first two interviews, "migration" was changed to "move" in all interview materials.

Outside of its impact on my interview data collection, my background also means that this project is intensely personal to me. Images and headlines reporting on the impacts Puerto Rico's healthcare crisis are not abstract catastrophes happening "out there," but dire situations impacting friends, and family, and loved ones. While I am grateful that in the wake of Hurricane Maria, discussions about the various challenges faced in Puerto Rico, from climate change to

politics to healthcare, have trickled into the American mainstream, I am well aware of the remaining ignorance that colors mainland U.S. conceptions of the island. Too well aware, in fact. A few months after the storm, I remember a pastor at my church in Austin asking me frankly if Puerto Rico “usually had electricity,” and being surprised to learn that it did. I remember the president of the United States calling Puerto Ricans lazy, and throwing paper towels at people who were suffering. And a year after the hurricane, an entire year, I remember a close friend asking me why Puerto Ricans have access to Medicaid and Medicare, considering that they “don’t pay taxes.” I know that this project will not dispel all of the misinformation that exists about the island. Dispelling misinformation is not necessarily my goal. While I aim to expand the theoretical framework of moralized economy, it is also my hope that in the course of this scholarly pursuit, what I have done is set down, in writing, an authentic story of Puerto Rican medicine.

Chapter 2: Medical Colonialism and Medical Values in Puerto Rico

This chapter describes and analyzes the origins of the "persistent power and influence" (Connell, 2007, p. 215) of colonization on Puerto Rican medicine, showing how early development of medicine on the island was shaped and restricted by social, political, economic and cultural ties to Spain and the United States. I explore the provenance of Puerto Rican medical values through two eras: Spanish Colonialism (1493-1898) and American Arrival and Occupation (1898-1947).

Under Spanish rule, municipal governments provided most medical services on the island, a practice that contributed to a paternalistic view of medicine that regarded the state as responsible for guaranteeing medical access. At the same time, Puerto Rico's class-based professional hierarchy encouraged affluent native doctors to seek medical training in Spain, and their ensuing exposure to 19th century Spanish liberalism[8] fostered a conceptualization of medicine as a modernizing tool and a professional understanding that physicians were duty-bound to heal not only their patients, but the entire island. After invading Puerto Rico, the United States continued the centralization of medical services within the colonial government and presented medical work as native doctors' patriotic obligation. However, this period also saw the professionalization of Puerto Rican physicians through the United States colonial regime, which promoted an American-style approach to medicine that cast biomedicine and lab-based research as the most prestigious and legitimate approach to care.

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[8] Liberalism was a major intellectual and political force throughout Europe during the 19th century. In Spain, liberalism was focused around rejection of Catholicism and the Spanish *ancien regíme*, including the country's absolutist monarchy. Liberals in Spain participated in a century of ongoing revolutions, seeking to redesign Spain around their belief in constitutionalism, parliamentarianism, the separation of church and state, and free-market capitalism (Burdiel, 1998; Luengo & Dalmau, 2018; Pacquette, 2015).

By recounting the links between early medical developments in Puerto Rico and the colonial regimes under which they occurred, I highlight the inherent contradictions that accompany medical development in colonized societies. Colonial medicine can contribute to the expansion of modern medicine and the improvement of public health in colonial states; however, these same medical advancements support, and are supported by, exploitative imperialistic agendas (Anderson, 2007; Go, 2008; Lo, 2002; Trujillo-Pagán, 2013). As Lo (2002) observes, colonial modernity projects "are…violent and intrusive" (p. 198) even when they lead to improved material circumstances for colonized people. Native physicians in the Global South must navigate this innately conflicting set of goals and values and "[generate] new cultural legacies [and] new meanings of modernity" (Lo, 2002, p. 198) within their specific contexts. In Puerto Rico, the unique socio-political climate, and the interests, values, and identities of Puerto Rican doctors, contributed to the adoption of medical ideals that encourage improved healthcare accessibility, including the conceptualization of healthcare access as a government responsibility and the positioning of medical services as physicians' patriotic duty. However, these same factors strengthened the hold of colonial regimes over the island and established medicine in Puerto Rico as dependent on, and inferior to, ruling colonial powers.

Spanish Colonialism (1493-1898)

Spanish colonialism played an important role in Puerto Rico's medical development. The Spanish colonial project delayed the development of island-based medical infrastructure, normalizing expensive trips abroad for formal medical training and indirectly instilling elite doctors educated in Spain with Spanish liberal sensibilities. High-class native doctors refitted

these ideas to their specific circumstances, embroiling themselves in anticolonial politics[9] and conceptualizing medicine as a mechanism for modernization that they were duty-bound and singularly qualified to employ as a means of "healing" the island. The period also brought a state-controlled, universal healthcare system that undermined physicians' autonomy. This delayed professionalization while promoting a paternalistic view of healthcare as a government responsibility. Ultimately, Spanish rule encouraged a medical context of colonial dependency that mirrored the island's economic, social, political, and cultural landscape. However, it also supported the development of patriotic, progressive medical values that would go on to serve as fundamental tenets of medicine in Puerto Rico, and laid the groundwork for a distinct Puerto Rican medical identity.

The Big Picture: Government Organization, Economic Development, and Social Status during Spanish Colonialism

Economic Development

Rather than enacting policy that supported Puerto Rico's economic development, Spain sought to use Puerto Rico to further its own imperialistic ambitions. By first encouraging the islands' dependence on Spanish markets and later discouraging broad-scale industrialization,

[9] For more detail on Puerto Rican physicians' anticolonial efforts during Spanish rule, please refer to or Arana-Soto's 1962 article "Los Medicos Abolicionistas" (The Abolitionist Doctors), or Chapter 4 of *Medical Colonization by Medical Intervention* by Trujillo-Pagán (2013). There are also a number of biographies on Puerto Rican doctors involved in anticolonial activities during the Spanish Era. *El Antillano* (The Antillean) by Ada Suárez Díaz (1988) chronicles the life of Dr. Ramón Emeterio Betances, who led the El Grito De Lares rebellion against Spain in 1868 and was eventually exiled to New York alongside Drs. José Julio Henna and Jose Francisco B. Basora for promotion of separatist activity. Information on Dr. José Celso Barbosa, an Afro-Puerto Rican doctor and the 1897 founder of the autonomy-promoting political party el Partido Autonomista Ortodoxo, can be found in Jiménez Roman's (1996) article exploring the impact of Barbosa's race on his political exploits, and in the 1937 biography of Barbosa (*Un Hombre Del Pueblo*, or A Man of the People) by Antonio Salvador Pedriera.

Spain solidified Puerto Rico's position as a periphery participant in a developing global capitalist marketplace. The early Spanish regime designated the island a trading post. However, during the first two centuries of Spanish rule Puerto Rico primarily served as a protective garrison for Spain's more commercially profitable holdings in the Caribbean and South America. Spain exploited Puerto Rico's resources and appropriated its economic potential to advance Spanish aims, repurposing the island's gold deposits to fund competition against other European powers, requiring islanders to use Spanish ships when conducting economic enterprise, and confining Puerto Rican trade to the Spanish port of Sevilla. As a result, the island's economy, which focused primarily on cattle rearing, leather, sugar, and ginger exports, remained Spain-dependent and stagnant through the 18th century (Dietz, 1986; Picó, 2006; Trías Monge, 1997, Trujillo-Pagán, 2013). In fact, scholars suggest that the most notable economic activity in Puerto Rico from 1500-1700 was a robust Caribbean and North American smuggling industry, which helped the island's small population of 10,000 cope with Spanish restrictions on trade but did not represent formal economic development (Dietz, 1986; Picó, 2006; Rodríguez-Silva, 2012).

Spanish influence over the island's economy during this period not only limited Puerto Rico's economic progress, but also impacted the island's population in terms of both volume and composition. By slowing economic growth, Spain's depletion of island resources and failure to provide opportunity for the expansion of trade minimized the number of settlers the colony could support. It also diminished the need for African slaves, as the sugar industry, where slave labor was profitable, accounted for only a small part of Puerto Rico's overall economic activity (Duany, 2017; Picó, 2006; Trujillo-Pagán, 2013). Spanish rule was also punctuated by the enslavement of between 16,000 and 600,000 Taíno people indigenous to Puerto Rico, further weakening the incentive to import slave labor from abroad (Duany, 2017; Picó, 2006).

Spain's restrictive economic policies contributed to Puerto Rico's limited population growth from 1500 to 1700, but the island's population increased in the 18th century as locals found modest economic success, and better nutrition, in the small-scale cultivation of Caribbean products like plantains, yams, and coffee (Picó, 2006; Rodríguez-Silva, 2012). However, despite improved economic prospects for island inhabitants, agriculture in 18th century Puerto Rico was not yet a cash-crop commercial venture, and Spanish interests took precedence, and ultimately stifled, the island's economic growth. Although Spain opened Cadíz (1715) and other continental Spanish ports (1765) to Puerto Rican trade, these economic developments reinforced Puerto Rico's position as an exploitation colony focused on providing raw materials to the motherland and reified the island's dependence on Spanish markets (Dietz, 1986). Furthermore, the island's limited trade routes were disrupted by Spain's successive and prolonged military conflicts with competing European powers, incentivizing islanders to continue participating in covert commerce (Picó, 2006). Just as in the first two centuries of Spanish occupation, Puerto Rico's economy during the 1700's was dependent on the Spanish empire, and local economic development remained secondary to Spanish concerns.

Changes to Spanish law and an expanding global capitalist market meant that Puerto Rico's economy and population shifted significantly during the last century of Spanish rule. Whereas previously all land in Puerto Rico had belonged to the Spanish crown, Spain conceded the right to private land ownership in 1778. In 1815, King Ferdinand the VII issued the Real Cédula de Gracias[10], which provided land to free people immigrating to Puerto Rico and allowed the island to develop commercial ties with countries in good standing with Spain (Dietz, 1986).

[10] The Real Cédula de Gracias provided seven acres of land to all free white immigrants, and an additional three acres for each slave they brought with them. Free black immigrants were given three acres (Dietz, 1986).

These changes to economic policy, along with a global boom in sugar prices lasting from 1815 to 1845, temporarily turned Puerto Rico into a sugar hub, which led to an increase in coastal plantations and the importation of between 60 and 80,000 African slaves. Furthermore, the success of the sugar industry attracted Spanish, French, German, and British planters, as well as skilled free Black and Mulatto laborers (Rodríguez-Silva, 2012).

Despite these developments, the impact of past and present Spanish policy towards Puerto Rico tempered the islands' economic development during the 19th century, limiting local industrialization, restricting capital availability, and impeding the island's ability to compete on an international economic stage. During the 1800's, Spain took measures to ensure that Puerto Rico's economy would remain firmly agricultural, denying the island the right to import non-agrarian industrial equipment and consequently hampering local attempts at broad-scale industrialization. As a result, Puerto Rico continued to rely on Spain and other metropole countries for manufactured supplies, which reinforced the island's position on the global periphery even as expanded access to non-Spanish markets loosened Puerto Rico's singular dependence on Spain (Dietz, 1986). In addition, after centuries of Spanish interference with the island's economic development, Puerto Rico struggled to compete with richer, more developed colonies and countries in an increasingly global economy (Dietz, 1986; Trujillo-Pagán, 2013).

As sugar prices dropped in the latter half of the 19th century and international competition overshadowed Puerto Rico's sugar industry, former sugar merchants (Spanish-born *peninsulares*) moved to the island's mountainous interior in search of opportunity within the burgeoning coffee sector, which was overtaking sugar as Puerto Rico's most important crop (Dietz, 1986; Trujillo-Pagán, 2013). *Peninsulares'* migration inwards displaced *criollos* (native elites made up of English, French, Dutch, and Irish immigrants and Spanish and African

islanders) and rural peasants that had previously dominated coffee-growing on the island, resulting in rising economic and class tension in the latter half of the 19th century (Rodríguez-Silva, 2012; Trujillo-Pagán, 2013). However, despite its impacts on social relations, the shift towards coffee did not represent a meaningful departure from Puerto Rico's economic trajectory. Ultimately, centuries of Spanish rule contributed to the development of a metropole-dependent, agrarian, industrially-underdeveloped Puerto Rican economy ill-positioned to thrive on the global stage.

Social Status Through[Racialized] Class

The diverse demographic developments accompanying Puerto Rico's economic evolution under Spain formed the foundations of the island's social hierarchy. Puerto Rico's subsequent social organization upheld a classed perspective on White superiority that left room for non-White individuals to gain prominence within Puerto Rican society. At the same time, a focus on "Whiteness" and "Whitening" reflected elite island inhabitants' ambitions for Puerto Rico to ascend the period's racialized global order.

Stunted economic progress, slow population growth, and the eventual migration of free people of color to the island in the 19th century increased mixed-race interactions in Puerto Rico and created opportunities for non-White individuals to occupy higher social statuses. Puerto Rico's Spanish population was small until the sugar boom of the 19th century, and the lack of large plantations, and accompanying surveillance, meant that enslaved people in Puerto Rico were granted greater freedom of movement and more chances to participate in independent economic activity (Rodríguez-Silva, 2012). Furthermore, after the influx of skilled Black and Mulatto craftsmen following the sugar boom, free people of color became a majority of Puerto Rico's population. As a result, although scholars are ambivalent about how many Indigenous

people survived the subjugation, enslavement, and disease that followed Spanish arrival in the Americas, DNA research suggests that there was a high level of racial mixing between White, Black, and Indigenous inhabitants (Castanha, 2010; Duany, 2017; Grandin, 2000). While Whiteness remained an important factor in securing high social status in Puerto Rico, islanders regularly crossed intimate racial boundaries, and some non-White individuals held prestigious positions within island society (Rodríguez-Silva, 2012; Trujillo-Pagán, 2013).

The distinct features of Puerto Rico's population under Spanish rule gave way to a social hierarchy founded on a racialized understanding of class. Rodríguez-Silva (2012) writes that Spanish and *criollo* elites capitalized on their Whiteness to separate themselves from the working class, enacting mid-19th century legislation that restricted the movement of free laborers and compelled the multi-racial peasantry to work alongside Black slaves. By forcing White, Black, multi-racial, free, and enslaved laborers to work together, "pure" White *criollos* and Spanish elites "Blackened" the entire peasantry and solidified their own racially superior class status.

Despite the symbolic and formal racial boundaries between upper-class Whites and the Black lower-class, Spain interpreted Puerto Rico's diverse racial context as indicative of the island's "racial impurity," which it used to justify the continuation of colonial rule on the island (Rodríguez-Silva, 2012). Correspondingly, Whiteness became important not only for achieving social success within Puerto Rico's borders, but also for propelling the island towards greater prestige and independence on a global scale. After Spain abolished slavery on the island in 1873, Puerto Rico's emerging *criollo* liberal elite promoted a vision of Whiteness that reflected this duality. Liberal intellectuals of the time, including physicians, constructed an image of the working class as lazy, lacking in discipline, and holding the island back. Although much of their scholarship cited the proximity of laborers to Blackness as a root cause of their "social sickness",

elites also left room for workers' improvement, and the consequent improvement of the entire island, through education by White superiors (Trujillo-Pagán, 2013). In allowing for the "Whitening" of the lower classes, liberal-elites obscured race's importance in island society (Rodríguez-Silva, 2012). At the same time, they promoted an image of Puerto Rico as capable of evolving towards greater racial superiority through the leadership of White island elites, reaffirming existing, racially-classed social hierarchies while working to "Whiten" Puerto Rico's racial makeup and potential for prominence within the broader world order.

Government Organization

Spain concentrated political power within the colonial regime, reinforcing Puerto Rico's ties to the Spanish empire and limiting local authority over island affairs. The Real y Supremo Consejo de Indias, a council composed of four members appointed by the King of Spain, held jurisdiction over all facets of colonial governance in not only Puerto Rico, but the entirety of the Spanish Americas. However, centralization over such a large number of holdings slowed down the Council's ruling process, impinging on their functional efficacy. In practice, Puerto Rico's Council-appointed governor, the head of the island's colonial government, military, and the highest judicial office, enjoyed the largest degree of unfettered influence on the island (Trías Monge, 1997).

More populous Spanish colonies merited a Real Audencia, a local colonial court with some administrative power. However, because of Puerto Rico's slow economic and population development, Spain failed to grant the island an appellate court until 1832. As a result, municipal mayors played an important role in the island's governance (Go, 2008, Picó, 2006; Trías Monge, 1997; Trujillo-Pagán, 2013). Though they were appointed by the colonial governor and served at his leisure, mayors had judicial power, and were charged with overseeing military, police, and

medical functions in their respective towns. Native-born Puerto Ricans were eligible to hold mayoral office, but governors often gave these positions to upper-class Spaniards, and Spain considered mayors yet another tool for connecting island residents with the central colonial government (Picó, 2006; Trías Monge, 1997).

Formal government structures ostensibly centralized power in Puerto Rico within the Spanish regime and Spanish representatives. However, incongruence between the way things in Puerto Rico were supposed to work, and the way they functioned in practice, was a staple of life on the island during Spanish colonization. Picó (2006) writes that because smuggling was central to the economy, Puerto Rico "…developed two political faces, one which obeyed the [Consejo de Indias], and one which operated in accordance with the agreement of the inhabitants" (p. 94). This practical decentralization allowed local elites to bypass Spanish authority on the island and formally insert themselves into positions of influence. Politics at every level ran on an unofficial system of bribes and political patronage, and Spanish officials often sold *cabildo* positions, town councils meant to represent local interests, to wealthy *criollo* natives (Go, 2008; Picó, 2006; Trías Monge, 1997).

After the immigration of Spanish loyalists during the sugar boom, local opportunities for formal posts within the island government diminished. The Spanish regime reserved *cabildo* positions previously held by local islanders for these new migrants, shutting *criollos* out of government just as their livelihoods and social status were threatened by economic upheaval (Picó, 1986). To make matters worse, Spain instituted colonial legislation that hastened *peninsulares'* takeover of land and coffee production by denying *criollos* access to Spanish financial markets (Trujillo-Pagán, 2013). In 1868, these tensions culminated in El Grito De Lares, an unsuccessful, armed, separatist revolt against Spain by disgruntled *criollo* landowners.

Trujillo-Pagán (2013) notes that scholars have alternately conceptualized El Grito de Lares as “a local revolt motivated by debt and… an anticolonial [rebellion]” (p. 40). Regardless of participants’ primary motivations, Spain responded to the event by passing a series of reforms that promised Puerto Rico its first taste of political autonomy. Spain legalized political parties on the island and implemented the 1897 Carta Autonómica, granting Puerto Rico self-government in the form of a popularly elected local bicameral parliament, universal male suffrage, and expanded municipal autonomy (Go, 2008; Trujillo-Pagán, 2013). Puerto Rico’s calls for separation, and Spain’s response, show the impact of the economic upheaval and social tension that characterized the island during the 19th century. These developments represented an unprecedented, tangible step towards greater independence. Puerto Rico held its first elections under the Carta Autonómica in July of 1898. In December, the charter was disbanded when Spain lost Spanish-American War and ceded Puerto Rico to the United States, a process devoid of Puerto Rican input.

Healthcare and Medicine Under Spanish Colonialism

The Medical System

Spain implemented a state-controlled healthcare system in Puerto Rico that worked to ensure all citizens had access to medical services while simultaneously limiting physicians’ professional autonomy. Organization of healthcare under Spanish rule encouraged a paternalistic ideal of state-guaranteed medical services that promoted broad healthcare access for islanders. At the same time, Spain’s dominance over the medical sphere, and its economically and demographically detrimental colonial policies, as well as local government corruption and a confluence of extra-professional native medical practitioners, stalled medical professionalization in Puerto Rico.

Wealthy and middle-class individuals living on the island usually obtained healthcare from independent physicians operating private practices. However, municipal mayors were responsible for ensuring that municipal residents, most of whom were lower class, had access to medical treatment (Trujillo-Pagán, 2013). Mayors designated municipal physicians, oftentimes through the same informal system of bribery-based political patronage that characterized other government appointments. These doctors were municipal employees, were paid through municipal funds, and were responsible for patient care, autopsies, forensic work, and sanitation investigations. When a municipal physician could not be procured, Spanish law dictated that other doctors provide care to municipal subjects. This regulation safeguarded access to medical services, but also extended state control over physicians' work beyond those formally employed by the government (Go, 2008; Trujillo-Pagán, 2013).

Physicians' authority within the medical sphere was further threatened by Puerto Rico's slow economic and population development in the face of Spanish colonial policies. These developmental delays contributed to an absence of island-based opportunities for formal medical training that exacerbated Puerto Rico's dearth of academically-trained physicians and made them vulnerable to competition from a much larger group of local pharmacists, *curanderos* (folk healers), and midwives (Go, 2008; Trujillo-Pagán, 2013). The proliferation of what the Spanish regime considered dubiously trained medical practitioners also indirectly encouraged government efforts to control medical practice by leading Spain to establish the Real Subdelegación de Medicina in 1841, which restricted municipal posts to formally trained doctors and drafted legislation for state control of medical licensing (Rigau-Pérez, 2016).[11] Ultimately,

[11] Medicine was relatively ineffective at improving health outcomes before the 20th century, regardless of whether practitioners were formally trained. However, scholars (Díetz, 1986; León Sanz, 2006; Trujillo Pagàn, 2013) contend that continental Spain had a better developed, more

the Subdelegación was ineffective, as the lack of licensed physicians, the diversity of healthcare providers, and the popularity of *curanderos*[12] complicated Spain's efforts to manage professional licensing and employ "legitimate" physicians in municipal posts (Rigau-Pérez, 2016; Trujillo-Pagán, 2013). However, the failure of the colonial regime to exact authority over medical government appointments due to the plethora, and popularity, of unlicensed medical practitioners also shows that Puerto Rican physicians were unable to monopolize the medical market or establish occupational control. In the end, Puerto Rican doctors retained limited professional influence relative to their medical competitors despite their prestigious educational backgrounds and state support of their expertise. In fact, state control of doctors' work through municipal physicians embroiled doctors in the common criticisms of corruption levied at the island's political system, leading to a degree of distrust from patients that compounded doctors' lack of professional power (Trujillo-Pagán, 2013).

In summary, doctors' inability to control their professional lives, which can be explained by the Spanish colonial regime's influence over medical service, the impact of Spain's economic policy on Puerto Rico's population, medical training, and lack of licensed physicians, the abundance of informal medical workers, and doctors' close association to corrupt municipal governments, hindered medical professionalization during Spanish rule. At the same time, Spain's state-controlled healthcare system provided important foundational principles for

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standardized system of medical training and legitimacy than other 19th century countries, which may have contributed to the regimes' perspective that municipal medical appointments should be restricted to "qualified" candidates.

[12] *Curanderos* provided healing services for spiritual and physical maladies based on indigenous practices, Catholic faith, and African rituals brought to the island by slaves. During the 19th century, they used herbs, blood-letting, or spiritual rituals as part of their healing practices. In Spanish Puerto Rico, *curanderos* served mostly poor and rural communities, while trained physicians sought employment in cities with higher paying patients and better amenities (Trujillo-Pagán, 2013).

medicine in Puerto Rico. Employing municipal physicians and charging mayors with filling these posts established an expectation that the state was responsible for organizing healthcare and delivering medical services to its citizens. Furthermore, laws requiring physicians to care for civilians in need, even when not directly employed by the state, privileged patients' access to healthcare over physicians' autonomy. In some ways, these characteristics are a predictable result of Spain's colonial orientation on the island, which incentivized centralized state control of citizens' lives. Along with the islands' underdeveloped economy, untrustworthy political system, and proliferation of folk healers, Spanish healthcare policies challenged native physicians' ability to establish professional authority. However, institutional medical organization under Spain also promoted a medical value system that conceptualized ensuring healthcare access as a governmental duty to its citizens, ultimately encouraging universal access to healthcare services.

Puerto Rican Physicians

Class Affiliations and Political Participation

Lack of local formal medical training under Spanish rule limited the accessibility of medical schooling to Puerto Ricans who could afford expensive trips abroad, making class a critical aspect of physicians' identities and the broader medical hierarchy on the island. At the same time, elite doctors' exposure to anti-monarchical liberal ideas while attending Spanish universities indirectly inspired them to participate in anticolonial exercises, and doctors considered political involvement part of their professional duty. Although Spain's economic and healthcare policies in Puerto Rico interfered with physicians' professional autonomy and slowed professionalization, by necessitating off-island medical training, Spain's colonial strategy resulted in elite local doctors' linking politics, medicine, and patriotism in ways that provided the

foundation for a Puerto Rican professional medical identity while also contributing to the island's political autonomy and independence efforts.

Although most physicians in Spanish Puerto Rico were members of an "intermediate [*criollo*] elite between workers and large landowners" (Trujillo-Pagán , 2013, p. 31), access to expensive formal education on the European continent formed the basis of a class-based medical hierarchy that wrought division within the profession. Wealthy families could afford to send potential doctors to medical school in Spain, but the less affluent trained on neighboring islands or in the United States (Trujillo-Pagán, 2013). Physicians educated in Spain occupied a higher status, as their family and class backgrounds garnered them access to prestigious Spanish medical schools, which translated to desirable employment on the urban coast, in private practice, with wealthy patients. In contrast, physicians with less-prominent familial lineages of lower-class status attended less-prestigious, non-European schools, and were relegated to less-desirable employment as a result. Some of these lower-status doctors established private practices and worked with the urban middle class, but many were engaged as low-paid municipal physicians, positions that placed them at the mercy of municipal mayors and indigent patients (Go, 2008).

In addition to serving as a source of class-based intra-professional differentiation, elite physicians' European educations exposed them to liberal Spanish scholars advocating for an end to absolutist monarchy, religious interference in state affairs, and the vestiges of economic feudalism (Burdiel, 1998; Luengo & Dalmau, 2018; Pacquette, 2015). Motivated by their anti-monarchical intellectual backgrounds, class relationships, and a desire for greater autonomy in a multitude of spheres, elite doctors became prominent members of an emerging anticolonial movement (Rodríguez-Silva, 2012; Scarano, 1998; Trujillo-Pagán, 2013). High-class physicians

were prominent players in separatist activities from before the establishment of official political parties on the island, with Dr. Ramón Emeterio Betances leading El Grito De Lares in 1868 and numerous physicians facing exile to the United States for their promotion of separatist sentiment (Arana-Soto, 1962). Wealthy physicians also identified as part of the broader group of liberal *criollo* elites that founded Puerto Rico's first political party in 1870, the Partido Liberal Reformista (PLR), which called for Puerto Rico to be granted equal rights and status with Spanish regions in Europe (Go, 2008). When the PLR split into reformist (Autonomista) and radical (Ortodoxo) factions[13] following the enactment of the Carta Autonómica, physicians straddled the political spectrum, and elite Puerto Rican doctors during this period "construed political involvement as both professional and patriotic duties" (Trujillo-Pagán, 2013, p. 122).

Physicians' political efforts under Spanish rule centered around anticolonialism and increased autonomy for Puerto Rico. This reflected doctors' desire for greater influence within the medical and political spheres, but it also illustrated a larger 19th century shift towards the formation of a distinct Puerto Rican identity, a movement especially pronounced among the island's landowning and educated classes (Morris, 1995). In this way, elite physicians' anticolonial political participation, ironically a consequence of the Spanish colonial regimes' indirect encouragement of Spain-based educational endeavors, established a connection not only between medical work and patriotic duty, but also between medical work and a sense of Puerto

[13] The reformists, led by journalist Luis Alberto Muñoz Marín, were members of the Partido Liberal Autonomista. They favored a closer relationship with Spain and attracted the more conservative planter class. In contrast, the radicals, headed by Afro-Puerto Rican physician Dr. José Barbosa, belonged to the Partido Autonomista Ortodoxo. The Autonomistas Ortodoxos called for more autonomy from Spain than the Partido Liberal, and courted urban artisans (Trujillo-Pagán, 2013, Arana Soto, 1961; Pico, 2004). However, both groups were considered liberal movements.

Rican-ness. This infused doctors' professional political obligations, and professional lives more broadly, with an understanding of themselves as inherently "different" from their Spanish rulers. While Spain's colonial project delayed professionalization, its stimulation of elite doctors' political exploits contradictorily helped create the potential for a uniquely Puerto Rican medical professional identity.

"Modernizing" Puerto Rico Through Medicine

Towards the end of the 19th century, physicians and other liberal elites in Puerto Rico began viewing progress on the island through the lens of medical modernism, employing a medical perspective to promote anticolonial change while retaining, and improving, their power and position within Puerto Rican society. Elite doctors used the medical language and liberal political foundation of medical modernism to cast themselves as uniquely capable of "healing" Puerto Rico through the elimination of Spanish colonialism and physical illness, articulating an understanding of their professional medical work as a patriotic duty to Puerto Rico. The liberal ideals that grew out of Puerto Rican doctor's Spanish educational pursuits not only prompted them to participate in anticolonial politics, but ultimately encouraged them to imbue their medical work with a sense patriotic purpose centered around the island, rather than the Empire.

Both the Autonomista and the Ortodoxo political parties saw themselves as the true representatives of what 1880's historian Salvador Brau termed *la gran familia puertorriqueña* (the great Puerto Rican family), which characterized Puerto Rican society as an organism whose organs (landlords, laborers, and merchants) worked harmoniously to support each another. Landlords and merchants, or the liberal elite, were depicted as the paternalistic heads of the family, and liberal political parties viewed themselves as not only responsible, but distinctly qualified for articulating the family's interests in the political sphere (Go, 2008; Rodríguez-Silva,

2012; Trujillo-Pagán 2013). As such, both liberal parties used Brau's organismic concept to present themselves as the "true" leaders of the laboring classes, seeking to increase their political prowess through peasant support while upholding the existing social hierarchy.

Liberal physicians embraced this medical approach to modernizing Puerto Rico. One notable contributor to this movement was the island-born, Spanish-trained Dr. Manuel Zeno Gandía, who's 1894 novel *La Charca* used a fictional representation of Puerto Rico's coffee-growing interior to present a medical-modernist, physician-centric vision of how best to elicit progress on the island (Rodríguez-Silva, 2012). On the one hand, the book blamed Puerto Rico's problems on the Spanish colonial system, calling for modern advancements including industrialization, improvements to government administration, and a public health system. On the other, *La Charca* presented a "sick", mixed-race peasantry as the cause of the island's woes, arguing that the physical weakness of peasant bodies impinged on their ability to work and corrupted their minds. Zeno Gandía concluded that to heal Puerto Rico's social body, the peasant's body must be treated first, concentrating modernization on the island within the medical sphere. At the same time, he stressed and that this was only possible through the paternalistic benevolence of White liberal elites, who were responsible for peasant's physical and psychological care (Rodríguez-Silva, 2012; Trujillo-Pagán, 2013).

Both Brau and Zeno Gandía used medical modernism to encourage the idea that liberal elites were paternalistic saviors, reifying existing social hierarchies. However, while Brau used medical language as a societal metaphor, Zeno Gandía presented medicine itself as the most important tool for securing the island's future, and subsequently elevated the role of physicians in Puerto Rican society. Zeno Gandía's writing reveals how physicians understood their obligations to Puerto Rico beyond the general paternalism ascribed to the liberal elite. Any

wealthy *criollo* could enter politics, or deliberate about how modernization should take place; physicians alone had the ability to heal the physical bodies of peasants, and therefore heal the nation. *La Charca* connected Puerto Rican physicians' work with a strong sense of patriotism, wherein they were duty-bound to fulfill a professional responsibility to the entire island.

The state-centric healthcare of Spanish colonialism prevented medical professionalization by interfering with physicians' ability to assert professional autonomy, and Puerto Rico's colonial relationship to Spain hindered its economic and population growth and subsequently slowed the development of local medical infrastructure. However, these same aspects of Spanish colonial rule contributed to the development of fundamental medical values on the island with distinctly progressive and nationalistic undertones. Through the colonial healthcare system, the government was positioned as responsible for guaranteeing medical access for its citizens, regardless of their socioeconomic status. Similarly, the island's lack of local medical training institutions helped create a medical education system heavily dependent on income, and elite Puerto Rican physicians educated in Spain were indirectly encouraged to participate in anticolonial liberal politics, subsequently expressing their role in the modernization of Puerto Rico as dependent on their professional skills and transforming their professional work into a patriotic duty tied to a distinct sense of Puerto Rican-ness.

American Arrival and Early Occupation (1898-1947)

Following the United States invasion and takeover in 1898, Puerto Rico's social, economic, political, and cultural landscapes shifted away from Spain towards supporting U.S. interests, weakening the influence of native elites and consolidating Unites States' domination of the island. Notably, while the United States used healthcare as a tool for expanding U.S. colonial control, American medical policies also reinforced many of the medical values that emerged

during the Spanish colonial era. Like under Spain, medical services were closely tied to the colonial state and prioritized providing care to the medically indigent, strengthening the belief that healthcare was a government-guaranteed service. Although the United States' colonial regime systemically undermined the legitimacy of doctors who pushed for Puerto Rico's political autonomy, it simultaneously encouraged the notion that Puerto Rican physicians' work was crucial to the modernization of the island, echoing elements of the nationalistic medical modernism promoted by Spanish-era elite physicians. In contrast to the Spanish period, early American occupation of the island finally saw the successful professionalization of Puerto Rican physicians through the U.S. colonial administration, a development accompanied by native adoption of American-style notions of medical prestige that focused on biomedical technology and research. Rather than encourage island doctors' professional autonomy, U.S. control over Puerto Rico's medical professionalization process served to establish a long-standing dependent relationship between medicine in Puerto Rico and medicine in the United States. Even as the U.S colonial regime supported professionalization and encouraged native physicians to view their medical work through a medical-modernist patriotic light, U.S. colonial policy obstructed local occupational control and open acknowledgement of an independent Puerto Rican professional identity by subsuming Puerto Rican medicine under the United States medical umbrella.

The United States Consolidates Control

Government, Economy, and Citizenship

The United States denied Puerto Ricans the right to self-government, and employed its unmitigated power over Puerto Rico's economy and government to suppress the influence of Puerto Rican elites, increase economic dependence on the United States, and consolidate American control of the island. From 1898 to 1900, the United States governed Puerto Rico

through a military administration, wherein American troops commanded by a presidentially-appointed military governor occupied the island. Military officers worked to circumvent continued calls for Puerto Rican autonomy by initiating an "Americanization" of municipal governments. As part of this policy, the U.S military administration held a strong supervisory role in local government, and enacted invasive sanitation measures limiting social gatherings to manage Puerto Rico's population and quell the potential for organized rebellion (Go, 2008; Rodríguez-Silva, 2012).

The United States also altered Puerto Rico's economy in ways that benefitted U.S. markets, jeopardized the influence of island elites, and strengthened American control. When wealthy Puerto Rican coffee planters lost their access to tariff-free Spanish holdings following U.S. takeover of the island, the United States refused to offer similar tariff relief in American markets, endangering the position of wealthy natives who represented a threat to American domination in Puerto Rico (Dietz, 1986, Go, 2008, Trujillo-Pagán, 2013). United States' disruption of Puerto Rico's coffee sector also compromised the survival of the island's interior peasantry, as coffee cultivation had previously enabled economically-strapped laborers to survive Puerto Rico's stratified economy by growing subsistence crops in between coffee bushes (Go, 2008; Trujillo-Pagán, 2013). These developments were exacerbated by Hurricane San Ciriaco in 1899, which not only destroyed coffee production and the accompanying opportunities for small-scale agriculture but also worsened existing food shortages, disrupted labor availability, and decreased employment opportunities. Instead of administering critical food aid to the devastated island, the American military administration tied food assistance to work, circumventing the expense of providing starving Puerto Ricans with nutritional support (Schwartz, 1992; Trujillo-Pagán, 2013).

In 1900, the United States enacted the Foraker Act, which further weakened the influence of native elites already devastated by the Hurricane San Ciriaco and promoted greater economic dependence on the United States. First, the act made Puerto Rico part of the U.S. monetary system and devalued the Spanish peso, increasing the price of food and limiting the purchasing power of Puerto Rican elites (Go, 2008). Second, it prohibited Puerto Rico from making commercial agreements with other countries and from determining its own tariffs, and required that all goods moving between the island and mainland be carried by more-expensive U.S. shipping lines. These regulations hobbled the economy and restricted the potential for an economic recovery outside of U.S. markets. As Dietz (1986) explains, "the island… was confronted with the necessity of competing with the products of some of the largest and most powerful firms on the U.S. market… without the possibility of protecting domestic production and industries (p. 90). Finally, the Foraker Act removed prior limitations on the amount of land a single person could own, and American officials failed to enforce its 500-acre land-owning restriction for corporations, prompting U.S. capitalists to buy up large swaths of coastal, sugar-rich property just as native elites found themselves without economic resources (Dietz, 1986). This multi-pronged onslaught to the coffee industry resulted in the emergence of a sugar mono-culture heavily dependent on U.S. markets and American capital with few options for local economic transformation. This, combined with the economic downfall of native elites, strengthened U.S. domination of Puerto Rico.

Besides its economic effects, the Foraker Act also implemented political changes that codified U.S. control of the island. The act called for a new civil government consisting of a governor and Executive Council (both appointed by the U.S. president), as well as a popularly

elected House of Delegates and a non-voting resident commissioner to the U.S. congress[14]. The 11-person Executive Council was required to have an American majority, ensuring that two of the island's three branches of government were controlled by the United States (Duany, 2017; Go, 2008, Dietz, 1986). In addition, while the Foraker Act made islanders Puerto Rican citizens, which entitled them to U.S. protection, it denied them the right to a trial by jury while subjecting them to U.S. laws that they had no power in shaping. Despite granting Puerto Ricans the ability to take part in government affairs, the Foraker Act denied islanders meaningful power over the island's political and economic trajectory.

The United States would not grant Puerto Ricans U.S. citizenship until the Foraker Act was replaced with the Jones Act in 1917. The Jones Act also gave the island a popularly elected bicameral legislature and a bill of rights. However, the updated legislation still denied Puerto Rico political representation in key aspects of local politics, as the U.S. president was granted the ability to veto legislation passed by the island's democratic legislature and the islands' governor and heads of most island government agencies remained U.S.-appointed Americans. In fact, Puerto Ricans would not elect their own governor until 1948, following Congress's amendment of the Jones Act in 1947. Furthermore, even as U.S. citizens, Puerto Ricans had no meaningful representation at the federal level, since Puerto Rico's congressional resident commissioner was non-voting and islanders were denied the right to vote for president (Duany, 2017). The Jones Act also failed to enact meaningful changes regarding the island's control over its economy, with the United States retaining power over Puerto Rico's tariffs, commercial treaties, and shipping

[14] Initially, the Foraker Act only granted Puerto Rico's resident commissioner the ability to speak before federal departments, rather than before Congress. The commissioner was able to enter (but not speak) in the House of Representatives in 1902, and to speak (but not vote) in the House in 1904 (Dietz, 1986).

restrictions (Dietz, 1986). Although the Foraker and Jones Acts fundamentally altered the organization of government on the island, they also exemplified how the United States strategically offered islanders hollow gestures of self-government that reasserted and at times expanded U.S. control over Puerto Rico's government, economy and people.

The Role of Race

Like Spain before them, the United States justified their colonization of Puerto Rico through the language of White supremacy. Americans presented their presence in Puerto Rico as part of their "White man's burden," wherein the United States was duty-bound to bring modernization to their uncivilized neighbors (Alamo-Pastrana, 2016; Espinosa, 2009). President McKinley's 1899 Carroll Commission, tasked with touring Puerto Rico and reporting its findings to Washington, described municipal governments and the over-arching system of political patronage on the island as primitive and unrepresentative, and native elites as lazy and corrupt. The U.S. responded to these concerns by taking on a tutelary and supervisory role (seen through legislation like the Foraker and Jones Acts) ostensibly aimed at preparing uncultured islanders for future autonomy. In practice, these actions solidified American control over Puerto Rico by weakening Puerto Rican elites, limiting the political influence of the Puerto Rican populace, and increasing economic dependence on U.S. markets (Alamo-Pastrana, 2016; Go, 2008).

During the early 20th century, the United States increasingly categorized Puerto Ricans' "inferior" race as an important factor hindering their mastery of self-government and explaining their general lack of modernization. Spanish blood was categorized by Americans as non-White, and islanders were described as afflicted with "negro morals" (Trujillo-Pagán, 2013, p. 9) that left them unsuited for political autonomy. Like the Puerto Rican elite under Spanish rule, Americans centered their concerns about race around the landless interior peasantry (the *jíbaros*),

insisting that U.S. colonization of Puerto Rico was a humane response to the proliferation of poor, non-White laborers composing the majority of the island's population (Rodríguez-Silva, 2012, Trujillo-Pagán, 2013). The United States addressed the issue of race in Puerto Rico in large part through medical colonialism, portraying invasive medical interventions as the best way to "Whiten" Puerto Rico's population and prepare the colony for political autonomy. However, rather than leading towards self-government, these medical undertakings also solidified U.S. domination over the island.

American Medical Colonialism

Sanitation and Smallpox Centralize Public Health

During its initial military occupation of Puerto Rico, the United States designated improvement of sanitation and eradication of smallpox as important healthcare objectives. Though presented by colonial officials as an altruistic mission, these campaigns helped to consolidate and legitimize U.S. power on the island by creating American-controlled infrastructure for monitoring and controlling the local population, excluding elite physicians that might have challenged United States occupation from medical posts, and integrating low-ranking native doctors into colonial medical efforts. Nevertheless, in centralizing public health movements within the colonial regime, the U.S. approach to sanitation and smallpox in Puerto Rico also reaffirmed existing state-centric paternalistic medical values and supported the conceptualization of medical work as a public service to the island.

The U.S.-led Carroll Commission identified urban sanitation as an area of concern in Puerto Rico, expressing surprise at Puerto Ricans' robust health in the face of their "general disregard" (Carroll, 1899, as cited in Trujillo-Pagán, 2013, p. 130) for hygiene. The report blamed poor sanitary conditions on what it saw as inexperienced, neglectful municipal

physicians, who were deemed untrustworthy for their participation in local patronage politics and greedy for refusing treatment to patients unable to pay. In part, the U.S. was observing the results of a chronically under-paid and over-burdened municipal physician workforce unable to keep up with competing demands on their attention. However, American officials and the Carroll Commission also conveniently ignored the havoc the Spanish-American War and Hurricane San Ciriaco had wrecked on Puerto Ricans' ability to engage in sanitary practices (Espinosa, 2000; Schwartz, 1992).

The Carroll Commission's findings allowed the United States to position the invasive sanitation policies and inoculation campaigns enacted during this period as necessary and benevolent responses to the island's alarming healthcare situation, reinforcing Spanish-era conceptualizations of the government as responsible for the healthcare needs of ordinary citizens among both native physicians working with the regime and the general populace. Furthermore, this characterization served to justify what amounted to tyrannical control over rebellious segments of the Puerto Rican population, and increased U.S. authority over the island's government institutions. While American interest in sanitation was framed by the Carroll Commission as part of a humanitarian concern for the Puerto Rican masses, the administration was particularly invested in legitimating its presence on the island, and dealt with sanitation issues in ways that helped solidify American control over island affairs (Carrion, 1983).

American ambitions were realized in part through the Super Board of Health (SBOH), established in 1899. The Board was composed of seven physicians, with positions reserved for five Americans and two native Puerto Ricans, and was responsible for developing sanitation regulations for the island. Board-approved sanitation measures expanded U.S. influence over Puerto Rican's everyday lives. Although the United States allowed municipal governments to

administrate these new measures, the costly methods drained local treasuries, and SBOH authority over sanitation standards weakened the power of local governments and municipal physicians who had previously controlled issues related to hygiene in municipalities (Espinosa, 2000). Moreover, integrating native physicians into the colonial regime through the SBOH and on-the-ground enforcement of sanitation standards gave American-controlled sanitation regulations a façade of local participation, granting them legitimacy while consolidating power in the hands of U.S. administrators (Trujillo-Pagán, 2013).

Concurrent with sanitation developments, the U.S. colonial administration responded to an 1898 smallpox outbreak with compulsory immunization that allowed the use of public health as a tool for colonial population control (Rigau-Perez, 1985). The U.S. military governor instated strict quarantine measures, and enforced vaccinations through fines, arrests, and barring un-vaccinated islanders from school, employment, and leisure activities. Scholars have found that U.S. efforts to control smallpox during this period were relatively ineffective. However, like sanitation measures, the U.S response to the epidemic enabled the colonial regime to further their influence by invasively monitoring and regulating the Puerto Rican population. Vaccination efforts also primarily used native doctors to administer vaccines, continuing the U.S. trend of controlling the development and organization of medical measures while absorbing native physicians into their colonial project (Rigau-Perez, 1985; Trujillo-Pagán, 2013).

Trujillo-Pagán (2013) notes that the use of rank-and-file physicians to carry out sanitation and smallpox regulations disrupted established hierarchies within the Puerto Rican medical profession. Providing low-status municipal physicians with positions within the colonial regime, and more broadly including them in the development of a new wave of public health infrastructure on the island, undermined elite physicians' influence within the healthcare sphere.

Along with policies like the Foraker Act, which curtailed the monetary prowess of high-class doctors, sanitation measures and smallpox campaigns diminished elite Puerto Rican doctors' ability to threaten U.S. occupation of the island. At the same time, the inclusion of native physicians in state-centric sanitation and smallpox eradication efforts reasserted the idea that healthcare was a public service among the medical profession. These public health endeavors represented a violently intrusive shifting of authority into imperialistic American hands, but also supported existing progressive medical values that promoted healthcare access.

The Hookworm Campaign

Race and Medical Modernism

In response to the destruction wrought by Hurricane San Ciriaco, the military regime erected tent hospitals in interior municipalities, bringing American military physicians in close contact with the Puerto Rican peasantry. Bailey K. Ashford, an army medic, observed an epidemic of anemia in the rural lower-classes, and connected the disease to widespread hookworm infections. The resulting effort to eradicate hookworm through a U.S.-led, state-centric, biomedical treatment campaign became a catch-all symbol of medical modernism on the island and a mechanism for consolidating American colonial control. The Hookworm Campaign echoed the racialized medical modernist theories of Spanish-era Puerto Rican liberal elites, and sought to explicitly link Whiteness, health, and economic progress. Campaign officials asserted that curing the parasite would bring the island economic success, prepare it for self-governance, and "Whiten" the Puerto Rican peasantry. At the same time, the Campaign threatened the position of upper-class Puerto Ricans by associating the entire island with "Blackness" in ways that disrupted elite islanders' claim to racial superiority. Ultimately, the Hookworm Campaign positioned biomedicine as the best tool for progress in Puerto Rico, providing opportunities for

native physicians that joined the colonial regime to harness the power of biomedical technology to defend their position in the island's social hierarchy and assert their unique role in the island's future.

The U.S. regime used the "discovery" of hookworm in Puerto Rico, which had been a topic of concern for Puerto Rican physicians from before American arrival, to explain the island's hurricane-related labor issues and primitive economy (Cabán, 2002). Ashford claimed Puerto Rico's tropical climate had created a stronger hookworm species, distinct from hookworm in the United States. Consequently, the landless peasantry was reimagined by Americans as sickened by their tropical environment. Americans theorized that through the medicine, the peasantry would be reinvigorated, labor issues on the island would cease, and Puerto Rico's economy could be modernized (Trujillo-Pagán, 2013).

Hookworm in Puerto Rico was also heavily racialized, although the specific ways that the parasite was connected to Blackness reflected American ambivalence around race on the island. On the one hand, American doctors repeatedly promoted the idea that Black bodies were resistant to the parasite, marveling at Puerto Rican strength and survival in the face of the rampant disease that they felt permeated life in an "unhealthy" tropical climate (Rodríguez-Silva, 2012). On the other, the campaign classified the majority of Puerto Ricans as weak and sickly due to this same tropical environment; islanders were non-White in their survival, well-suited to their tropical surroundings, but White in their sickly disposition. Hookworm treatment, and medicine more broadly, represented a potential strategy for redeeming Puerto Rican's Whiteness, as well as the island's economic productivity (Trujillo-Pagán, 2013).

American conceptualizations of *jíbaros* as sickly and non-White, and their understanding of medicine as a tool for modernizing the island and civilizing the peasantry, coincided with the

attitudes of elite Puerto Rican physicians at the end of the 19th century. At the same time, unlike the native elite during Spanish rule, U.S uncertainty around the island's Whiteness was not confined to the landless masses, and Americans pushed the notion that Spaniards, and therefore Puerto Ricans at every level of the social hierarchy, were racially "other" (Trujillo-Pagán, 2013). Classifying the entire island as non-White compressed the island's racial hierarchy, threatening the status of native elites who had previously depended on Whiteness to justify their social position.

In response to these challenges, native physicians who joined the hookworm campaign manipulated the movement's biomedical focus, using microscopes and laboratories to advocate for the Whiteness of island residents by "confirming" Whites were particularly susceptible to hookworm infections (Trujillo-Pagán, 2013). Through medical study, Puerto Rican doctors reimagined the *jíbaro's* sickly disposition as proof of their Whiteness, and therefore the Whiteness of the entire island, a racial status that could be reclaimed through medical treatment. Not only did a focus on biomedicine provide an avenue for native elites to recover their social position on the island, but doctor's research conclusions were also advantageous to Puerto Rico's political future, since Whiteness implied self-governing capabilities. Furthermore, the resurgence of medical modernism was particularly advantageous to native physicians, who reasserted their role as uniquely qualified medical arbiters of the island's progress. However, unlike during the Spanish-era, medical modernization under the United States colonial regime redirected medicine on the island towards a biomedical focus, and biomedicine became the most legitimate tool for physician's seeking to "heal" the island and ensure its successful future.

Biomedicine, Campaign Organization, and the Consolidation of U.S. Control

Although native physicians co-opted biomedicine to secure their position in Puerto Rico's social hierarchy and propel the island towards racialized American ideals of self-government and economic success, the U.S. colonial regime's insistence on a biomedical focus in treating hookworm also supported the expansion of United States' control and influence on the island. The U.S. downplayed the well-documented role of social factors in hookworm spread in favor of biomedical explanations, undermining the expertise of native doctors who advocated for a more comprehensive medical perspective. Furthermore, like previous public health campaigns for sanitation and smallpox, biomedicine provided benevolent justification for Americans to infringe on municipal governments' influence and monitor local populations. However, even as the campaign's biomedical approach furthered U.S. imperial aims and was functionally ineffective at managing hookworm in the face of islanders' poverty-stricken conditions, the United States' decision to administer biomedical treatment through the colonial government bolstered the broader ideal of government accountability for citizens' health and encouraged the expansion of healthcare access into underserved rural areas.

Scholars note that anemia among the Puerto Rican peasantry was likely related to compounding social factors, including iron deficiency as a result of famine-like conditions following the 1899 hurricane and the inability of poor laborers to purchase shoes, which would have protected them from exposure to hookworm in the coffee fields (Amador, 2008; Dubos; 1959; Tesh, 1988). In fact, many Puerto Rican physicians treating anemia before the 20th century followed a Spanish-style tradition of medicine that focused on the disease's social components. While some Puerto Rican doctors continued to advocate for addressing nutritional deficiencies after U.S. arrival, the United States compromised native claims to medical expertise

by deeming sociomedical theories unscientific when compared to a more modern laboratory-and-microscope approach to healthcare. As many scholars have noted, the biomedical interventions instituted by the American regime failed to control hookworm or anemia, as laborers remained under-nourished and impoverished in part because of American policies that systemically weakened the island's economy (Amador, 2008; Dubos; 1959; Tesh, 1988; Trujillo-Pagán, 2013).

Adopting a biomedical focus meant that the Hookworm Campaign was able expand colonial surveillance of the previously inaccessible interior peasantry by requiring native laborers to visit U.S. medical stations, submit themselves to medical study, and receive repeated biomedical treatment. This provided a degree of infrastructural benefit to island residents, as Puerto Ricans in the rural interior had historically had less access to formal healthcare in comparison with their coastal, urban counterparts (Trujillo-Pagán, 2013). However, because Puerto Rico's remote mountains were a hotbed of social unrest after Hurricane Ciriaco and the United States' strategic decimation of elite influence, hookworm also served as an instrument for monitoring threats to U.S. power and supporting the United States colonial regime (Scarano, 2012; Trujillo-Pagán, 2013).

Similarly, the state-centric organization of the Hookworm Campaign served to undermine municipal governments in favor of U.S. authority and fortify U.S. influence over local populations. After it was officially incorporated into the insular government's Department of Health (DOH, formerly the SBOH), the Hookworm Campaign became a central source of U.S. medical authority. For example, in 1910, sanitation officers who had previously been appointed by municipal governors were brought under the campaigns influence. This gave the DOH, and therefore the American colonial governor, authority over municipal appointments, reducing local

autonomy (Trujillo-Pagán, 2013). At the same time, by providing state-sponsored medical care for indigent patients, the Hookworm Campaign encouraged medical access on the island to be viewed as a governmental duty. In this way, the campaign's organizational structure reinforced existing progressive, if paternalistic, universal healthcare ideals that formed the foundation of Puerto Rico's medical values.

Professionalization Through the Colonial Regime

Like sanitation policies, smallpox inoculation, and hookworm treatment, the professionalization of medicine in Puerto Rico took place through the United States colonial regime, strengthened American colonial control over Puerto Rico, and rearranged the island's established medical hierarchy and ideals to serve American interests. While medical professionalization on the island coincided with the beneficial buildup of modern medical infrastructure, native physicians' professionalization through the American regime was not accompanied by the occupational control that usually characterizes the professionalization process. The U.S. regime, rather than native doctors, retained authority over medical institutions, medical licensing, and access to medical work. Furthermore, U.S. control over professionalization in Puerto Rico imbued the island's medical field with conflicting orientations towards professional identity and professional work, categorizing medical practice, and therefore the medical profession, as a patriotic service to Puerto Rico but simultaneously discouraging local doctors' participation in Puerto Rican politics and pushing native physicians, and native medicine, into a dependent relationship with medicine in the United States.

The Hookworm Campaign played a significant role in American-led professionalization on the island. Both elite and rank-and-file Puerto Rican physicians participated in the Hookworm Campaign at every level, including as sub-station directors. However, American officials

expressed disapproval for native doctors with political affiliations, and denied them entry into Campaign leadership (Trujillo-Pagán, 2013). By including native physicians, the Hookworm Campaign garnered legitimacy among islanders, controlled native physicians' work, and was able to selectively elevate the status of "desirable," politically unaffiliated physicians who were not a threat to broader colonial goals. Puerto Rican physicians were offered prestigious occupational opportunities by American officials, but they could only take advantage of these positions if they participated in and cooperated with the U.S. colonial project. To do so, native doctors were compelled to rescind strong political affiliations, a central part of their professional life under Spanish rule. Denying employment to physicians with political aspirations weakened Puerto Rican elites' ability to challenge the U.S. administration and "Americanized" Puerto Rico's medical field by eliminating a distinctly Puerto Rican focus on anticolonial political involvement from the medical professionalization process.

While licensing during professionalization is generally an avenue through which physicians obtain control of their work, in Puerto Rico, the American colonial regime employed medical licenses to centralize their authority, disrupting the professional legitimacy of elite physicians, formalizing American ideas about the inferiority of native doctors and Spanish medical training, and disrupting the anticolonial potential of the medical profession. The SBOH awarded licenses to native physicians on a case-by-case basis according to arbitrary requirements, reducing the influence of local doctors who were now indistinguishable from folk healers and midwives (Amador, 2008). These subjective standards reinforced American conceptualizations of Puerto Rican doctors as inferior to their American counterparts, and further weakened the social positions of elite native physicians, since formerly prestigious medical degrees from Spain no longer guaranteed an official medical license. New licensing requirements

also meant that the Hookworm Campaign became the only means of legitimate medical employment and modern, biomedical training accepted by the U.S. administration, consolidating control of medicine within the colonial regime even as it provided a means for native physicians to seek legitimacy (Trujillo-Pagán, 2013).

In effect, the U.S. colonial administration created a licensing system that pushed native physicians to join the colonial regime to maintain their professional status, and thus forced doctors to choose between their political aspirations and politically charged professional identities and the opportunity for professional legitimacy. Furthermore, because the only opportunities for professional legitimacy were through the biomedically-focused Hookworm Campaign, buying into the supremacy of American-style biomedicine became a necessity rather than a choice for native doctors, hindering the expression of Puerto Rican ideals of medical treatment and prestige that might have included a less-singularly biomedical focus, especially considering the more sociomedical approach encouraged under Spanish rule. Whereas doctors during the Spanish-era were crucial players in the islands' anticolonial struggles, professionalization through the U.S colonial regime dismantled the revolutionary potential of Puerto Rican physicians, instead forcing them to seek greater autonomy through U.S.-sponsored biomedical modernism.

Elite physicians attempted to retain their status within the medical profession, and their control over medical work, through the creation of the Asociación Médica de Puerto Rico (AMPR) in 1902. The organization pursued a series of strategies to wrestle medical authority back from the U.S. colonial regime, appealing to a class-based conceptualization of doctors' professional identities by purporting to represent *la clasé médica* and advocating for AMPR control over municipal physician's appointments. Despite these efforts, high-status AMPR

members began participating in the Hookworm Campaign in larger numbers by 1905. Whereas previously the AMPR sought to compete with the colonial state and become the institution through which Puerto Rican professionalization could occur, elite native physicians' increased presence in the Hookworm Campaign signaled that the colonial administration was gaining ground (Trujillo-Pagán, 2013). Finally, in December of 1910, the AMPR voted for incorporation into the American Medical Association (AMA). By subsuming themselves under the AMA, the AMPR helped to formalize Puerto Rican medicine's dependence on medicine in the United States

In reducing the power of elite physicians, the Hookworm Campaign flattened the class-based medical hierarchy that had thrived under Spanish rule. Instead, it granted medicine on the island a new hierarchy, wherein American physicians and American medicine were regarded as superior to their Puerto Rican counterparts. For example, the research gathered as part of the Hookworm Campaign was foundational to building an infrastructure for professional medical education on the island, a critical element of professionalization. However, early educational leadership on the island reveals that American physicians occupied the most prominent positions of the island's budding medical education system. While native doctors were involved in the Institute for the Study of Tropical Medicine, founded in 1912, at subordinate leadership levels, the organization's senior administrator was an American, and the institute reported to the presidentially-appointed colonial governor. After being converted into the School of Tropical Medicine in 1926, it was placed under Colombia University, and functioned primarily as a research program for American medical students looking to gain experience studying tropical medicine in a tropical environment. This continued until 1949, when local doctors, politicians, and the AMA transformed the School of Tropical Medicine into island's first independent

medical school, the University of Puerto Rico School of Medicine15 (UPR) (Arbona & Ramirez de Arellano, 1978; Trujillo-Pagán, 2013).

UPR's history shows how U.S. policies relegated Puerto Rican physicians to inferior positions within their own professionalization process, forcing them to report to American administrators instead of autonomously managing the development of the island's medical education system. In addition, UPR's initial connection to Colombia University exemplifies how Puerto Rican medicine occupied a subordinate, auxiliary, and dependent position to medicine in the United States. Medical education in Puerto Rico was not established, developed, and led by Puerto Rican doctors to create a unique training program for Puerto Rican medical students. Instead, its roots belong to a satellite American medical program, led by American faculty, aimed at providing opportunities for mainland medical students.

Through the Institute of Tropical Medicine and the Hookworm Campaign, Puerto Rican physicians participated in scientific research. While these endeavors enabled native doctors' pursuit of professional knowledge and garnered international acclaim, the American-style emphasis on biomedical research reconfigured Puerto Rican ideas about medical prestige. Whereas under Spanish rule, local doctors had often focused on social factors impacting health, the campaign operated under the larger umbrella of tropical medicine, and prioritized the modern, scientific study of parasites through microscopes and labs. Furthermore, tropical medicine was closely associated with support of colonial regimes, and colonizers across the globe regularly used it to reinforce the inferiority of colonized people (Caponi, 2003; Farley, 1991). Because tropical medicine was a foundational element of their professionalization, Puerto Rican physicians contributed to a specialty that functioned to reassert their own inferiority, and

[15] For more information and analysis of UPR, please see Chapter 3.

made this concentration a basic component of medicine on the island. However, the colonial context within which native physicians professionalized meant that tropical medicine was in effect the only option for pursing professional knowledge, showing how professionalization through the U.S. regime served to establish physicians in Puerto Rico as secondary to their U.S. counterparts.

Trujillo-Pagán (2013) writes that "Puerto Rican medicine was ultimately Americanized by promoting tropical medicine and professional prestige" (p. 101), pointing to the U.S. administration's displacement of a prior focus on political participation and social medicine in favor of biomedical research and treatment. Similarly, professionalization through the Hookworm Campaign and the subordination of the AMPR to the AMA relegated medicine in Puerto Rico to an inferior and dependent position with respect to American medicine, complicating the expression of a Puerto Rican medical identity by inextricably linking medicine in Puerto Rico to medicine in the United States. However, it's worth noting that the importance of tropical medicine to Puerto Rico's medical development made studying medical issues native to Puerto Rico a foundational element of medicine on the island. Combined with an island-focused appeal to medical modernism, medicine under U.S colonialism centralized the welfare of Puerto Rico, reinforcing a paternalistically-progressive perspective on healthcare and framing medical practice as a patriotic endeavor even as it stripped native physicians of their professional ties to patriotic political movements and independent identities.

Conclusion

The medical ideals that emerged from first the Spanish and later the United States colonial eras represent the foundational ethical tenets of medicine in Puerto Rico. However, the contrast between 1.) the oppressive imperialistic goals and ideologies that encouraged, and were

encouraged by, this emerging medical value system, and 2.) the commitment to local health, improvements to medical infrastructure, and increase in medical access that accompanied its establishment illustrate the inherent contradictions associated with medical development in colonial contexts (Anderson, 2007; Go, 2008; Lo, 2002; Trujillo-Pagán, 2013). Both Spain and the United States instituted state-centric healthcare systems that improved healthcare access on the island by providing care to all Puerto Ricans regardless of their ability to pay. Although this kind of medical organization served to centralize colonial control over the island, the resulting ethical implications are that in Puerto Rico, the government is understood as responsible for guaranteeing medical care. Furthermore, medical organization under both Spain and the United States promoted a belief in medical modernism, with Spain's cross-continental, class-based medical education system and the United States' Hookworm Campaign encouraging native physicians to view medical work as the best tool for promoting progress on the island and presenting doctors as uniquely qualified to lead the charge towards modernization. This inspired local physicians in both colonial eras to connect their medical work with a patriotic duty to Puerto Rico, infusing doctor's professional lives with nationalistic significance.

The framing of medical service as a patriotic endeavor was complicated by stringent control of medical work and licensing during American occupation, which disconnected native doctors from anticolonial political participation that had been fundamental to physicians under Spanish rule. This separated doctors from their politically-charged Puerto Rican identities while simultaneously encouraging them to embrace a patriotic understanding of their professional lives. United States control over the professionalization process also pushed native physicians to adopt an American-style approach to healthcare, wherein biomedicine was cast as the most legitimate and prestigious strategy for research and care. Colonial states and Puerto Rican

physicians co-constructed medicine on the island, and Puerto Rican doctors employed biomedicine and the Hookworm Campaign to reassert their position in Puerto Rican society. However, the United States repeatedly made native physicians dependent on the colonial regime and American medicine for power and opportunities, and treated them as inferior to their American counterparts. These developments further complicated doctors' connections to Puerto Rican aspects of their professional identities, incentivizing the centralization of ties to Puerto Rico with regards to medical practice while stigmatizing these same ties with regards to medical legitimacy and prestige.

An important impact of colonization on Puerto Rico's medical development has been a series of deep-seated and at times contradictory medical values and interests; a belief in a government-sponsored universal healthcare access, a depoliticized focus on biomedicine over sociomedical factors, the contrast between local physicians' patriotic understanding of their medical work and desire for control over their professional lives with their dependence on American medicine for legitimacy. Chapter 3 explores how Puerto Rico has attempted to construct and moralize their medical institutions to incorporate these medical values following the island's expanded local autonomy during the post-World War 2 commonwealth era, and how the economic and political constraints of enduring colonial ties to the United States have shaped and restricted these efforts.

Chapter 3: Institutionalization of Medical Morals During the Commonwealth Era

This chapter focuses on the development of medicine in Puerto Rico during the commonwealth period, examining local efforts to balance institutionalization of cultural ideals of care with economic efficiency throughout the Regional (1953-1993) and Reforma Eras (1993-present). During both periods, Puerto Ricans drew from colonial legacies originating during the Spanish and early-U.S. colonial regimes that encouraged conceptualizing healthcare as a government responsibility, and expanded this ideal to include an understanding of healthcare as not only a state duty, but also a human right. At the same time, Puerto Rican physicians pushed for the institutionalization of a modernist medical culture by advocating for increased access to specialized biomedical care and training, a perspective inspired by their professionalization during the United States' Hookworm Campaign and reinforced by their continued dependence on American medicine for legitimacy. While not inherently in conflict, these two frameworks were repeatedly proven irreconcilable with the reality of inequitable federal funding for healthcare, high levels of local poverty, federal restrictions on the island's options for economic resurgence, and federal healthcare legislation that narrowed institutional avenues for organizing and providing healthcare.

Below, I conceptualize the islands' attempts at balancing contradictory medical values within a resource-poor colonial setting, identifying three distinct models of care, describing their accompanying moralizations, and examining the multifaceted reasons for their failure: SocialCare, BioCare, and GroupCare Pueblo[16]. During the first part of the Regional Era, the island's government instituted a public, universally-accessible, regionally-organized healthcare system that sought to save costs by decreasing the need for expensive biomedical interventions.

[16] GroupCare Pueblo, signifying GroupCare Of The People.

This SocialCare moral economy defined “quality” care as public, preventative, sociomedical, and economical. Over time, native physicians drawing from a culture of biomedicine, motivated by a desire for increased compensation, seeking legitimacy and prestige within the context of American medicine, and aided by the advent of Medicaid and Medicare, succeeded in replacing SocialCare with BioCare. Under BioCare, the island’s healthcare system remained formally defined through the regionalization model. However, it functioned practically as a universally-accessible, publicly-funded, increasingly private system wherein physicians found economic success by defining “quality” care as universal access to expensive biomedical technologies.

When BioCare’s combination of broad accessibility, high-priced biomedical treatment, and limited Medicaid funding became financially unsustainable, Puerto Rico dismantled the Regional System and instituted Reforma. Inspired in part by a U.S.-led push towards neoliberalism, the Reforma System’s GroupCare Pueblo moral economy sought universal healthcare access to care through state-funded medical assistance to the poor administered through private, for-profit HMO’s. GroupCare Pueblo tried to balance healthcare needs and healthcare costs through business-oriented tactics. It excluded poor patients who were deemed financially solvent from the program and focused on preventative care through capitation, deducting money from primary physicians’ salary when patients utilized specialized services. These changes to the organization and provision of healthcare were moralized by defining “quality” care as publicly-funded, privately-supplied, and neoliberally managed.

GroupCare Pueblo was unsuccessful across multiple dimensions. Instead of fulfilling patients’ right to healthcare, it created an uninsured sector of the Puerto Rican population; instead of promoting healthcare accessibility, it incentivized rationing of costly specialized procedures for the poorest patients and privatized hospitals that previously housed specialized

public medical residencies; instead of advancing economic efficiency, it increased healthcare spending through HMO's profit and administrative costs. However, the failures of GroupCare Pueblo were facilitated, and exacerbated, by the islands' United States colonial context. Puerto Rico's ties to the United States directly and indirectly pushed compatibility with the U.S. neoliberal medical market, subjected the island to U.S. healthcare policies that reinforced existing resource shortages, and contributed to the inaccessibility of care by enabling Puerto Rican physicians to exit the Reforma system in search of biomedical prestige and profit on the U.S. mainland. In this way, Puerto Rico's present-day healthcare crisis is not only the result of GroupCare Pueblo and its unsuccessful effort to balance limited resources and universal access through neoliberalism, but is also inextricably linked to Puerto Rico's political, economic, and medical subjugation to the United States. The rest of this chapter explains and analyzes the process through which this occurred.

The Regional Era (1953-1993)

After seven years of planning and study, Puerto Rico's healthcare system was regionalized in 1960. The islands' government centralized provision of medical services and medical education under a public healthcare system that all Puerto Ricans could access for free. This development coincided with a significant shift in the island's political relationship to the United States via commonwealth status, which allowed Puerto Ricans to elect their own governor and enact a local constitution, and represented the first major healthcare development under the new political system. However, during the Regional Era, the Commonwealth government and native physicians volleyed to institutionalize divergent visions of balancing access to "quality" care with Puerto Rico's economic and resource limitations, struggling to reconcile the island's cultural colonial legacies of medical state paternalism and biomedical

superiority. At the beginning of this period, the island's government implemented SocialCare, which provided universally accessible, state-provided care made economical through a preventative, sociomedical focus, eschewing a focus on costly biomedical intervention. However, over the course of the Regional Era, Puerto Rican physicians pushed for, and eventually succeeded in implementing, an alternative BioCare model engendered in part by native doctors' historical and contemporary dependence on American medicine. In contrast to SocialCare, BioCare was characterized by broad accessibility to expensive, government-funded biomedical care, research, and training, the increased proliferation of private medical services, and a medical market that provided doctors with improved economic prospects. Although Puerto Rican actors were instrumental in the creation of both Social and BioCare, pathways for the institutionalization of these disparate philosophies, as well as their relative successes and failures, were shaped and restricted by U.S. congressionally-mandated healthcare policy, unequal access to federal healthcare funds in comparison to mainland states, and poor economic conditions linked to an enduring colonial legacy of economic exploitation and contemporary federal restrictions on the island's economic activity.

Prelude: Human Rights and Healthcare in the Puerto Rican Constitution

Both the Spanish and early United States colonial regimes used medicine as a colonizing tool, encouraging a conceptualization of healthcare that centralized provision and regulation of care within the colonial government in order to monitor and control Puerto Rican residents. While Spain made municipal mayors responsible for ensuring that their residents had access to medical treatment, bringing government directly into peasant homes, the United States implemented stringent sanitation measures that limited public gatherings and used government-

run medical outposts to infiltrate the island's rebellious coffee-growing region.[17] In accordance with these early tactics, Puerto Rico developed an understanding of health and healthcare as government duty that, like other countries with similar public health philosophies (Espuelas, Barraso & Vilar Rodriguez, 2008; Muñoz Machado, 1995; Porter, 2005), grew into a belief in healthcare as a human right. However, despite the United States' role in promoting this ideal, the inclusion of a right to healthcare in Puerto Rico's commonwealth constitution was prohibited by the U.S. Congress, and the island's economic dependence on the mainland restricted its ability to push forward with independent political change that might have granted it control over the inclusion of healthcare in its foundational governmental document. Puerto Rico's colonial legacy helped to produce the cultural ideal of healthcare as a human right, but the island's contemporary colonial relationship to the United States limited its ability to formally incorporate it as a base principle of its new government.

Political and Economic Antecedents

Puerto Rico's move to commonwealth status in the early 1950's was precipitated by several interrelated factors, including increased political democratization in the 1940's that indicated a limited potential for greater political autonomy. A global push for decolonization following World War 2 meant that the United States was looking to solidify its reputation as an anti-colonial force, and was receptive to demonstrating its commitment to decolonization by adjusting its political relationship with Puerto Rico (Malavet, 2004). Small allowances for greater local autonomy began almost immediately following the war; President Truman appointed a native Puerto Rican governor for the first time in 1946,[18] and the island's

[17] See Chapter 2.
[18] Before the appointment of Jesus T. Piñero in 1946, Puerto Rico's governors were not only appointed by the United States president rather than popularly elected, but had almost

governorship became a popularly elected post in 1947. Although increased local input at the gubernatorial level represented a meaningful shift away from overt political domination by the United States, the democratizing effects of this change were tempered by the continued influence of the Jones Act of 1917, which forbade island residents from voting for the U.S. president and denied the island a voting U.S. congressional representative. Puerto Ricans still had no meaningful influence over federal policies they were nevertheless compelled to abide by (Duany, 2017).

In contrast to the modestly democratic developments within the island's government, economic changes during this period served to more firmly entrench the island's colonial relationship to the mainland. The aftermath of The Great Depression, The New Deal, and World War 2 resulted in substantial unrest among displaced workers and the disillusioned middle class on the island, hastening the creation of a new generation of political leaders and providing popular support for significant transformation (Ayala & Bernabe, 2009; Malavet, 2004). The most prominent member of the island's post-war political vanguard was Luis Muñoz Marín, who founded the Partido Popular Democrático (PPD) in 1938 and oversaw a period of substantial industrialization. Initially, he and the PPD attempted to promote non-agricultural industrialization through state-run capitalism and land reform, creating a state-owned, public, independent corporation (the Puerto Rico Development Company, or PRDCO) in 1942 to support the advancement of local industrialized production, and passing legislation that allowed the Puerto Rican government to buy back land from American-owned corporations exceeding an existing federal-level restriction on corporate ownership of more than 500-acres. The PPD hoped

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exclusively been White, monolingual, U.S.-born men. Only one American appointee, James R. Beverly, assigned as governor in 1929, could speak Spanish before arriving on the island.

that generating a local industrial base would soften Puerto Rico's economic dependence on the mainland by diminishing demand for imported products and evading large-scale absentee capitalism from the United States. However, their efforts were thwarted by Puerto Rico's subjugation to federal laws and regulations In denying Puerto Rico the right to enter into international commercial treaties and set its own tariffs, the Jones Act promoted dependence on U.S. manufacturers for factory technology and left new local industry vulnerable to competition from the U.S. mainland. Furthermore, in spite of the fact that the land buy-back policy was enforcing federal law, the federal government's refusal to financially contribute to that program—in part because of the lobbying efforts of multimillion-dollar sugar producing corporations—diminished the program's reach (Ayala & Bernabe, 2009; Dietz, 1986).

In response to the failure of locally-led industrialization, Muñoz Marín and the PPD moved forward with what became known as Operation Bootstrap, privatizing much of the PRIDCO's[19] infrastructure and instituting "industrialization by invitation." The Puerto Rican legislature passed the Industrial Incentives Act in 1947, which exempted qualifying firms in Puerto Rico from having to pay municipal, property, excise, and insular income tax. Since under the Jones Act individuals and corporations were already exempt from paying federal income tax on income earned in Puerto Rico under the Jones Act, these tax breaks drew American companies to the island and shifted local employment towards U.S. firms. Despite initial claims to the contrary, industrialization in Puerto Rico served to strengthen mainland domination of the island's economy rather than create space for independent economic ventures (Ayala & Bernabe, 2009; Dietz, 1986; Duany, 2017).

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[19] The Puerto Rico Development Company was renamed the Puerto Rico Industrial Development Company (PRIDCO) in 1945 (Dietz, 1986).

Whereas political advancements in the post-war period indicated the potential, however limited, for Puerto Rico to gain greater autonomy, economic developments reasserted the island's dependence on the United States. In particular, Operation Bootstrap served to solidify the island's subjugated economic position, and thus narrowed the options for Puerto Rico to redefine its connection to the mainland. Consequently, whereas early in his political career Muoz ńMarín had advocated for independence, the island's increasingly dependent economic trajectory, and the likely unfavorable economic outcome should U.S markets be closed to Puerto Rican commerce if the island became independent, pushed him to reconsider. When Muñoz Marín became the first democratically elected governor of Puerto Rico in 1948, he asked Puerto Ricans to consider a vote for him an endorsement for transitioning Puerto Rico to an Estado Libre Asociado (Free Associated State, or Commonwealth) through a local constitution granted by the United States Congress (Píco, 1986).

The Commonwealth Deal

Scholars have noted that Public Law 600 (PL 600), the 1950 legislation that outlined the terms of Puerto Rico's new commonwealth status and granted Puerto Rico the right to organize a constitutional convention, delineated a modification to Puerto Rico's political label (from protectorate to commonwealth) rather than a meaningful alteration to the island's political or economic position; for all practical purposes, Puerto Rico remained a colony (Malavet, 2004; Píco, 1986; Trías Monge, 1997). As a commonwealth, the island continued to be economically subjugated to the United States, as U.S. customs and tariffs still applied and the United States maintained power over the island's commercial treaties, which meant that local industrial production would remain unprotected from a market flooded with U.S. products and Puerto Rico would have no recourse for creating international trade relationships that might lessen its

dependence on U.S. goods. The law also reinforced Puerto Rico's political subordination to the mainland. Although PL 600 gave Puerto Rico jurisdiction over the organization of *local* executive, legislative, and judicial matters, it denied the island a voting representative in congress as well as electoral votes for president. Undeterred by Puerto Rico's lack of meaningful representation at the federal level, the law asserted that federal legislation still applied to the island, and that federal acts would supersede the insular constitution in the case of conflict (Ayala & Bernabe, 2009).[20]

Even with these systemic inequities, the commonwealth arrangement was heralded as a victory by both the PPD and the United States. The PPD claimed that the agreement was a positive change in Puerto Rico's status, and framed the transition from a protectorate to an Estado Libre Asociado as the first in a series of steps towards greater autonomy. For the United States, making Puerto Rico a commonwealth bolstered its argument that the island had been "decolonized," protecting the United States' international reputation while preserving the more advantageous elements of its relationship with the territory (Ayala & Bernabe, 2009; Dietz, 1986; Venator-Santiago, 2011).

Congress had promised to approve Puerto Rico's constitution so long as it abided by the parameters outlined in PL 600. However, Congress rejected Section 20 of the Puerto Rican constitution as socialist in a flurry of Red Scare hysteria, and sent the document back to Puerto Rico for ratification under the condition that the offensive segment be removed. Using language inspired by the United Nations Declaration of Human Rights and President Franklin D.

[20] Ayala and Bernabe (2009) note that much of PL 600, passed in 1950 and still in effect today, was taken directly from the Jones Act, passed in 1917, which was taken directly from The Foraker Act, passed in 1900. In effect, Puerto Rico's political status and economic freedoms have remained unchanged for over 100 years.

Roosevelt 1941 “Four Freedoms” speech (Arbona & Ramírez De Arellano, 1978; Venator-Santiago, 2011), Section 20 afforded Puerto Ricans the right to healthcare, education, employment, and an adequate standard of living. It read:

> *Section 20.-The Commonwealth also recognizes the existence of the following human rights:*
>
> *The right of every person to receive free elementary and secondary education.*
>
> *The right of every person to obtain work.*
>
> *The right of every person to a standard of living adequate for the health and well-being of himself and of his family, and especially to food, clothing, housing and medical care and necessary social services.*
>
> *The right of every person to social protection in the event of unemployment, sickness, old age or disability.*
>
> *The right of motherhood and childhood to special care and assistance.* (as quoted in Amato, 1951, pp. 326-327)

Puerto Rico’s original constitution strove to imbue the new Puerto Rican government with a robust set of social values centered around progressive human rights, specifically the right to medical care, to a standard of living that promoted health and well-being, and to social protection in the case of sickness and disability. However, Puerto Rico’s colonial relationship to the mainland, which left its newly industrialized economy under U.S. control and limited its ability to forge ahead with political reform without U.S. approval, restricted the island’s power to incorporate the right to healthcare in its constitution. When Puerto Rico’s new status was authorized on July 25, 1952, the final draft of the constitution was ratified without Section 20 at the insistence of the United States Congress. Ironically, the U.S. denied Puerto Rico the ability

to implement cultural values partially inspired by early U.S. colonial rule and a U.S. president as foundational elements of its new government. The success of the United States in eliminating Puerto Rico's formal incorporation of the right to healthcare into the 1952 constitution served as an ominous precursor to the cycle of repeated failure that characterized Puerto Rico's attempts to provide care to its population under SocialCare, BioCare, and GroupCare Pueblo. In each case, the realization of cultural ideals of care rooted in colonial legacy were limited, at least in part, by Puerto Rico's continued colonial condition.

Early Regionalization and the SocialCare Model (1953-1965)

The Bayamón Project and Defining "Quality" Care

In the early 1950's, the Puerto Rico Health Department, the University of Puerto Rico School of Medicine (UPR), and the Rockefeller Foundation proposed regionalization of Puerto Rico's health services as the most cost-effective way to improve healthcare on the island (Maldonado, 1984; Seipp, 1961; Strand, 2008). To test that proposition, the committee commissioned and implemented a pilot regionalization program in the Bayamón District, located in the Northern part of the island, in 1953. As a prototype for the Regional System, The Bayamón Project provides insight into the moral economy behind regionalization's SocialCare approach to healthcare, wherein "quality" care was defined as government-provided, preventatively and sociomedically focused, and economically efficient. At the same time, the resistance of native physicians to the Bayamon Project's preventative care model was a harbinger of their opposition to, and role in dismantling, SocialCare, and revealed a commitment to an American-style modernist medical culture that would eventually constitute a foundational element of BioCare's moral economy.

Regionalization, an approach to healthcare organization first conceptualized in England in 1920, promotes the hierarchical organization of healthcare into three tiers: a primary level, focused on curative and preventative services and treatment of simple healthcare conditions; a secondary, more specialized level that provides diagnostic, therapeutic, and rehabilitative services; and a tertiary level with a central institution that includes super-specialties, teaching, and research. Under the regional organization of healthcare, costs are controlled by reducing duplication through coordination across healthcare levels and by emphasizing the inexpensive, preventative primary level of the system in order to curtail use of expensive specialized care at the tertiary level (Bu & Fee, 2008). Prior to regionalizing its healthcare system, healthcare in Puerto Rico was administered and organized at the municipal level, with some larger public hospitals serving multiple municipalities. Municipal care was supplemented by fee-for-service private practitioners serving wealthier patients. However, the disparate elements of the healthcare system were not well integrated, making delivery of care haphazard and patient follow-ups difficult. Officials hoped regionalization would allow for increased coordination that would address some of these weaknesses, and The Bayamón Project sought to test whether the quality of care could be improved by using existing healthcare resources to emphasize primary care and improved coordination between healthcare institutions (Arbona & Ramírez De Arellano, 1978).

Before the program was expanded to the rest of the island, nurses, dieticians, and social workers were re-trained to orient them to the regionalization philosophy, which emphasized a holistic approach to care that included decidedly social dimensions of health, including public health education for lay-people, nutrition, and out-patient services in local homes and schools. Medical professionals balked at the programs' social focus. Native nurses, who were told to

become "whole nurses who administer to whole people" (Arbona & Ramírez De Arellano, 1978, p. 31), bristled at what they saw as less-prestigious and lower-quality sociomedical work when compared to the biomedically focused, U.S.-led smallpox and hookworm campaigns they had originally been trained to administer. Dr. Guillermo Arbona (1978), who became Secretary of Health in 1957, wrote that re-orienting Puerto Rican physicians to the goals of regionalization encountered similar resistance. Re-education was made doubly difficult by the large number of doctors educated outside of the island who lacked training in human relations, and the reluctance of UPR to emphasize socially-focused front-line community training in their medical curriculum.

Through the Bayamón Project, the Puerto Rican government began the process of institutionalizing medical state paternalism while grappling with the reality of limited healthcare resources. The resulting SocialCare model redefined state-provided, economically practical care as "quality" care, which was conceptualized as encompassing streamlined, community-oriented medical services that improved healthcare accessibility for the entire population. Healthcare was guaranteed by the government, and "quality" care was economical and accessible. Moreover, "quality" care under SocialCare was accessible *because* it was economical. SocialCare's increased ability to follow-up with patients and move them along the primary, secondary, and tertiary levels of the Regional System to ensure they received appropriate treatment was made possible by re-allocating existing resources to better integrate the healthcare system, and by focusing on inexpensive, preventative, social medicine rather than expensive biomedical technology.

The resistance of Puerto Rican medical professionals to what they saw as SocialCare's inferior approach to healthcare reveals a conflicting set of cultural ideals that prioritized modern medical technology and biomedical superiority. This contradictory set of medical values can be

traced back to the early 20th century U.S-led Hookworm Campaign, a government-run program that aimed to eliminate hookworm among *jíbaro* laborers in Puerto Rico's coffee-growing region. The campaign explicitly discredited social dimensions of care and disease that would have required the United States to engage in a comprehensive confrontation of poverty on the island. Instead, the program relied on the direct administration of biomedical medication, which conveniently allowed the colonial regime to extensively monitor the mountain-dwelling peasant population. Puerto Rican doctors professionalized through the Hookworm Campaign, and biomedical research within the program became an important tool for native physicians to gain status and training during the United States' occupation of the island.[21] As a result, the medical profession in Puerto Rico developed a cultural ideal of medicine centered around the superiority of biomedical principles, defining "quality" care as biomedical care and basing their own position and prestige on their understanding and use of specialized biomedical techniques. This BioCare framework was reinforced through what, until the founding of the island's first medical school in 1950 (UPR), was an almost exclusively U.S.-based medical education, as U.S. medical professional culture heavily emphasizes the importance of modern scientific training and biomedical research (Starr, 1982; Trujillo-Pagán, 2013).

A focus on biomedical care and a moral imperative for government provision of medical services are not innately incompatible. If medical and financial resources were unlimited, a government could feasibly provide care to every citizen using expensive biomedical strategies. Likewise, preventative care is not entirely antithetical to a biomedical approach to health. Vaccines are themselves a form of biomedical preventative care, although higher levels of medical prestige are assigned to more specialized, and usually more expensive, application of

[21] See Chapter 2

biomedical technology. What made these cultural values irreconcilable in Puerto Rico was the practical reality of finite healthcare resources. During the early part of the Regional Era, SocialCare was able to realize state-centric healthcare for all only by equating “quality” care with an inexpensive sociomedical approach. While the Bayamón Project worked to align physicians with SocialCare’s community approach to healthcare through re-education, doctors’ commitment to biomedicine remained an ever-present threat that would eventually help overturn the SocialCare model.

SocialCare and Its Opponents: Organized Medicine Reacts to Regionalization

In 1960, the Bayamón Project was extended across the island, and Puerto Rico’s 78 municipalities were organized into five regions with a 3-tiered hierarchical structure. Each municipality had a number of local health centers that comprised the primary level of regionalization focused on preventative and public healthcare. Local health centers could refer patients who needed more specialized treatment to the secondary level, which consisted of five regional hospitals that provided more specialized hospital services. Finally, the tertiary level, eventually known as Centro Médico, provided the most specialized healthcare services, including those that required expensive medical technology (Arbona & Ramírez De Arellano, 1978; Strand, 2008).

Just as with the Bayamón Project, the rhetoric of physicians, through organized medicine, around the island-wide implementation of SocialCare provides insight into the curious combination of universal access, increased private care provision, and improved physician profit that were eventually included in the BioCare model. In February of 1958, the Asociación Médica de Puerto Rico (AMPR) published an editorial that described the system as a “hydra-headed monster” that would limit the free choice of physicians. Supported by the AMA, the AMPR

asked the Rockefeller Foundation to withdraw their support from the project if regionalization allowed non-indigent people to access state-run medical services. In response, the Rockefeller Foundation and Governor Luis Muñoz Marín emphasized that the Regional System was meant to function in coordination with private medical services, rather than in competition. They also clarified that indigent and non-indigent patients alike would be treated free of charge within the new healthcare system. Assurance that the government would not collect payment from wealthier patients, and would therefore avoid competing for profits with private physicians, quelled professional concerns, and the AMA and AMPR withdrew their opposition (Arbona & Ramírez De Arellano, 1978).

In some ways, the AMPR's response to regionalization shows straightforward concern with physician's professional dominance and economic prospects. Regionalization, the AMPR feared, would lead to regimented government medicine that would threaten physician's power in clinical settings and divest private physicians of income by collecting payment from wealthy patients. However, the AMPR's rationalization of their opposition to regionalization and its SocialCare approach can also be understood as the promotion of an alternative institutional pathway for realizing universal access to care that prioritized their own economic success. Native physicians' resistance was not to the entirety of regionalization, but rather to the extension of government care beyond indigent patients; after all, the AMPR seemed open to government provision of care to the poor, and was accepting of state-sponsored healthcare for the wealthy so long as payment was not collected. In the AMPR's vision, wealthy patients who could afford to do so would purchase care from private physicians while indigent patients would be guaranteed free care in government clinics. Although the AMPR did not explicitly tie their rationale to a moral framework that conceptualized healthcare as a human right, or to the belief that

government had the responsibility to ensure that right, they implicitly endorsed a healthcare system that sought to balance government-guaranteed healthcare access with a finite medical market within which private physicians could turn a profit, seeking to retain physician's economic position without interfering with government efforts at increasing accessibility to care for those unable to pay.[22] The themes of biomedicine, state-secured universal access, private provision of care, and profit that informed physicians' protests against SocialCare at its inception later became core elements of the BioCare model.

Early Roots of BioCare: Medical Education and the Regional System

The establishment of the University of Puerto Rico School of Medicine and the integration of medical education with the Regional Healthcare System represented another arena in which native physicians and the Puerto Rican government negotiated institutionalization of the cultural ideals of medical state paternalism and a modernist medical approach within the context of restricted resources and structural limitations imposed by an enduring dependency on U.S. medicine. The resulting educational infrastructure saw doctors attempt to generate ties between patriotic, service-oriented public healthcare on the one hand and biomedical research and training on the other by shifting public healthcare resources to the highly technical tertiary level of the medical system and creating medical residencies that increased accessibility to costly, specialized, biomedical care. This undermined the SocialCare approach that constituted the basis of regionalization, and represented a shift towards the BioCare model that would eventually supplant it.

[22] In fact, such an arrangement would likely replicate the two-tiered medical hierarchy of Spanish colonialism, wherein doctors unable to attract enough wealthy patients to establish a private practice were forced to seek employment within the municipal government, which tasked them with caring for the medically indigent for less pay than their privately employed counterparts (see Chapter 2).

Establishing A Medical School

As the United States drafted Puerto Rican doctors into World War 2, the island experienced a physician shortage that spurred interest in the establishment of a 4-year medical school[23] (Ramírez de Arellano, 1989). In the years leading up to the medical school's inauguration, stakeholders across Puerto Rico wrestled with institutional constraints related to island doctors' ongoing dependence on American medicine and dueling nationalistic, social, and biomedical care doctrines. First and foremost, the AMPR and the Puerto Rican government were concerned with creating a medical school recognized and accredited by the AMA as "Class A," which meant that medical training in Puerto Rico would necessarily reflect the United States' modernist medical culture. At the same time, the AMPR and the island's government argued that a local medical school should orient medical education to Puerto Rico's needs, "[training] physicians for public service to instill in them the spirit of service to the people" (Dr. Costa Mandry,[24] as quoted in Ramírez de Arellano, 1989, p. 267). Many medical educators in both Puerto Rico and the United States saw efforts to link medical knowledge with societal context, a hallmark of the SocialCare model, as similar to "inferior" medical schools in Latin America. However, concerns over the "American-ness" of the school went beyond apprehension about the school's underlying ideology. As a pre-requisite of awarding the school a Class A designation, the AMA recommended English-only instruction so that physicians trained on the island could complete internships, residencies, and research fellowships in the United States, designated non-

[23] Prior to the founding of UPR, Puerto Rico had a School of Tropical Medicine, established in 1926 and run by Colombia University. The school functioned as an outpost for research and supplementary training but was not a four-year medical university (see Chapter 2).
[24] Dr. Costa Mandry was a Puerto Rican physician who was designated in 1944 by the Chancellor of the University of Puerto Rico to study and report on what a Puerto Rican medical school should accomplish. The study was conducted in large part through visits to medical schools in the United States (Ramírez de Arellano, 1989).

English textbooks as substandard, and thwarted efforts to partner with medical schools outside of the United States (Ramírez De Arellano, 1989; 1990).

The legitimacy of Puerto Rican medicine hinged upon its association with medicine in the United States. As such, it was imperative that the island's medical school be accepted by American medical institutions through a "Class A" designation. This reality was a legacyof early U.S. control of medical work and education during the professionalization process, when the American colonial regime barred doctors who criticized U.S. rule from joining the Hookworm Campaign and accessing "legitimate" avenues for licensing and training. Similarly, debates surrounding the overarching philosophy of what became the new medical school in 1950 were also shaped by the island's colonial past. Local emphasis on the school's "Class A" status indicates preoccupation with a brand of prestige prioritizing biomedical superiority over sociomedical principles, another Hookworm-related cultural vestige. Likewise, AMPR and governmental support for a medical school oriented towards public service and Puerto Rico's medical needs was rooted in the medical nationalism of the Spanish and early U.S. colonial eras.

While AMA-defined prestige was supported and accepted by both the U.S. and Puerto Rican medical communities, efforts to orient medical education towards public service and the island's medical needs were derided by medical educators in both the United States and Puerto Rico for drawing from foreign, substandard, sociomedical principles despite being partially rooted in U.S. policy. In the end, Puerto Rican medicine's dependence on U.S. medicine for legitimacy necessitated that "responsiveness to local health conditions… [take] a back seat to the concern for…a 'Class A' medical school" (Ramírez de Arellano, 1989, p. 266). When the University of Puerto Rico School of Medicine was accredited in 1954, SocialCare compatible

sociomedical aspirations were subsumed to AMA-approved biomedical training and research, paving the way for UPR to be utilized as an incubator and battering ram for the BioCare model.

BioCare Intrudes: UPR Goes Regional

When, in 1959, the dean of UPR requested that Bayamon's regional hospital be utilized as a teaching hospital for the medical school, Puerto Rico's public health administrators granted his request with a caveat; instead of UPR taking over the Regional Hospital as an independent entity, the university must administer health and welfare for the entire Bayamón region, and could use the area's healthcare institutions for research and teaching purposes (Madonado, 1984). The integration of UPR into the Regional Healthcare System's medical network allowed BioCare to encroach upon regionalization's SocialCare framework. UPR compromised regionalization's focus on preventative care by increasingly investing public medical resources into high-priced, biomedically-focused care and training to the detriment of primary services. In doing so, the school not only facilitated a shift towards the BioCare model favored by physicians, but also intensified the financial insolvency that eventually contributed to the complete privatization of the medical system in 1993.

UPR's takeover of the Bayamón Region was followed by rapid buildup of medical education infrastructure intimately tied to the public Regional System, including specialized research laboratories and medical and surgical residencies. Furthermore, the region's Puerto Rico Medical Center (Centro Médico) functioned as the tertiary level of the Regional System (Maldonado, 1984). Built on a 117-acre plot in San Juan, Centro Médico housed medical technology and medical specialties unavailable elsewhere on the island, making it an important site for medical training as well as administration of specialized medical care (Arbona & Ramírez De Arellano, 1978). In order to more equitably disperse medical services and connect

physicians with communities outside of San Juan, UPR also established residency programs in Ponce and Mayaguez (Maldonado, 1984).

UPR's assimilation into the Regional System's SocialCare ecosystem allowed the school to function as a Trojan Horse for the BioCare model. Scholars (Arbona & Ramírez de Arellano, 1978; Maldonado, 1984) suggest that UPR invested heavily in specialized research and training to the detriment of primary healthcare services, diverting resources away from preventative practice towards Centro Médico and new residencies in Ponce and Mayaguez. UPR's reallocation of medical resources reveals fundamental discrepancies between the SocialCare and BioCare philosophies. While "quality" care under SocialCare was defined as sociomedically-focused primary care, broad healthcare accessibility, and economic efficiency, UPR and BioCare saw "quality" medical education as characterized by specialized training, biomedical research, and medical services centered around expensive modern technology. For UPR, the primary level of the Regional System was, as they put it, a source of "professional contamination" (Arbona and Ramírez de Arellano, 1978).

The process by which Puerto Rico's medical education infrastructure matured under regionalization demonstrates how physicians, through UPR, attempted to use a BioCare approach to medical education to resolve the tension between dueling medical values, restricted resources, and strong ties to American medicine. Although UPR abided by medical modernist principles, shifting sociomedical resources towards Centro Médico, it also worked to satisfy its pledge to public service and fulfill the cultural ideal of healthcare as a government-guaranteed right by investing in the creation of public residencies outside of the metropolitan area, increasing accessibility to biomedical services across Puerto Rico. Furthermore, because UPR was formally incorporated into the Regional System, physicians' actions not only inculcated

BioCare into medical training, but also initiated the institutionalization of BioCare in Puerto Rico's broader healthcare sector, undermining SocialCare's focus on economic efficiency, social medicine, and disease prevention by emphasizing island-wide access to expensive biomedical treatment. Moreover, UPR's costly BioCare approach contributed to an ongoing shortage of funds within the Regional System that was partially responsible for its eventual collapse.

Medicaid, Medicare, and the Institutionalization of BioCare

UPR's subversion of the SocialCare model was compounded by the regulations and financial structure accompanying Medicaid and Medicare, enacted in 1965. The programs were designed to increase access to healthcare for the elderly and poor through state-sponsored insurance, an objective that closely aligned with the Puerto Rican value of government-guaranteed healthcare. Consequently, they should have helped address the healthcare needs of the island's large, medically indigent population, an economic reality that the limited commercial freedoms afforded to the Commonwealth by U.S. policy made difficult to improve. However, the programs' lack of restraint on physicians' medical spending and commitment to free choice in healthcare providers enabled native doctors to prioritize expensive biomedical technology and pushed patients and program funds away from the public Regional System into private physicians' pockets. As a result, Medicaid and Medicare undermined SocialCare's publicly-dispensed, preventative approach to economically efficient healthcare. The influx of public money into the private sector, where doctors had greater occupational control, allowed physicians to incrementally replace SocialCare with BioCare, which "balanced" biomedical superiority, state-sponsored care, and market realities through the expanded use of publicly-funded, privately-administered, expensive technical care that provided doctors with larger profits. BioCare ultimately undermined the government's ability to ensure healthcare access by

siphoning resources away from preventative care and the Regional System. Moreover, the BioCare model failed to "balance" its values with Puerto Rico's resource-limitations; in the end, fulfillment of both medical state paternalism and a modernist medical approach were incompatible with the reality of the island's colonial relationship to the United States, which increased the population-level need for subsidized healthcare resources while limiting federal healthcare funding and constraining institutional pathways for healthcare provision.

Policy Exceptions, Privatization, and (Bio)Medical Spending

Medical professional associations in both the U.S. and Puerto Rico campaigned against the passage of Medicaid and Medicare, which they saw as a threat to their professional control and the economic prospects of private physicians (Starr, 1982). Attempting to minimize the potential impact of the legislation on the island, the AMPR lobbied Congress to adjust the amount of federal funding Puerto Rico received for the Medicaid program. As a result of their efforts, the island was expected to pay 50% of Medicaid expenses rather than the 45% originally proposed. Furthermore, while states received federal funding based on how much they spent on local Medicaid programs with no limit, the AMPR persuaded Congress to cap Medicaid payments to Puerto Rico at $20 million, unlike American states which had no such limit (Arbona & Ramírez De Arellano, 1978; Pagán- Berlucchi & Muse, 1983).

The financial and organizational structure of Medicaid and Medicare helped to promote BioCare by strengthening the island's private medical market and physicians' ability to utilize specialized treatment at the expense of the public Regional System and its SocialCare approach to health. Medicare afforded Puerto Rican residents over the age of 65, many of whom were medically indigent and had previously relied solely on the Regional System, the ability to purchase healthcare from the private sector. Elderly Puerto Ricans on Medicare increasingly

chose to receive services from private hospitals, funneling the program's federal dollars away from the public healthcare system into a private sector where doctors' greater occupational control enabled them to eschew SocialCare's preventative focus in favor of biomedical interventions (Mulligan, 2014; Rivero, 2005). Furthermore, Medicare allowed physicians to charge more for services than what the program would compensate, resulting in expanded public healthcare spending on highly–specialized technical services that strained the Puerto Rican government's already limited healthcare funding (Arbona and Ramírez De Arellano, 1978; Starr, 1982). Medicaid was similarly destructive. While initially the $20 million in funding provided by the program (which essentially served as a block grant) went directly to the Regional System and SocialCare, 1967 legislation required Medicaid recipients to be given "free choice" when seeking a healthcare provider, allowing indigent Puerto Rican patients to seek healthcare in the private sector (Maldonado, 1984; Perreira et al., 2017). The surge of funding and patients to private care also precipitated the departure of many primary care physicians previously employed by the Regional System into the island's parallel private sector, creating brain-drain and staffing shortages at the most important level of the Regional System and debilitating the execution of SocialCare's preventative healthcare approach (Arbona and Ramírez De Arellano, 1978).

SocialCare's ability to achieve the cultural ideal of state-sponsored universal healthcare within the constraints of limited medical resources rested upon public provision of care that increased healthcare accessibility by more efficiently allocating medical resources towards preventative medical services. When Medicaid and Medicare allowed for the diversion of funds and personnel to the private sector, they also encouraged a surge in medical spending. Enabled by the programs' regulatory structure, inspired by the island's modernist medical values, and free

from the preventative SocialCare mandate, private physicians augmented the use and accessibility of highly-specialized technical services. Under this BioCare model, doctors' defined "quality" care as publicly-funded, but not publicly-provided, as biomedical rather than preventative, and as universally accessible through privately employed doctors with a high degree of occupational control. While in theory, BioCare successfully fulfilled the contradictory ideals of state-guaranteed healthcare and biomedical superiority, it "balanced" these values with market realities by increasing both overall healthcare spending and physicians' profits. It drained public funds already strained by the capping of Medicaid monies, contributing to the financial collapse of the public healthcare sector, and ushering in Reforma and GroupCare Pueblo.

Compounding Effects of Colonialism

The emergency of BioCare was aided by historical and contemporary colonialism. Conflicting medical values institutionalized by BioCare were encouraged by the island's past colonial legacy, but the island's general shortage of medical and financial resources was inextricably linked to Puerto Rico's present-day colonial relationship to the United States. Medicaid and Medicare were enacted by a Congress where Puerto Rico had no vote, and signed into law by a president for which Puerto Ricans could not cast a ballot. This meant that Puerto Rico lacked meaningful democratic input over the legislation's content, which they could have used to make the programs more conducive to supporting SocialCare and the Regional System, or to push for the island to receive uncapped funding equal to states.

The high level of economic need on the island, which necessitated greater reliance on publicly-funded healthcare, was also attributable in part to the terms accompanying Puerto Rico's commonwealth status, which barred the island from enacting tariffs that would have protected local industry from North American competition and denied Puerto Rico the right to

engage in profitable international economic partnerships and trade (Ayala and Bernabe, 2009). Operation Bootstrap and accompanying social reforms, including the improvement of the electrical, water, sewage, and road systems and a wage increase for sugar and needlework laborers, had resulted in a higher quality of life across the island (Pantojas-Garcia, 1989; Dietz, 1986). However, wages in Puerto Rico remained low in comparison with the United States, and the absolute wage difference between the island and mainland only increased after 1950.[25] Despite this, prices on the island remained high, as Puerto Rico's continued reliance on imports from the United States and the extension of a Jones Act-era requirement that shipments be made on expensive U.S. ships elevated the cost of necessary goods like food and clothing (Dietz, 1986). Almost half of the Puerto Rican population qualified for either Medicare or Medicaid in 1965, heightening the programs' impact on healthcare on the island and exacerbating the ensuing shortage of funding and resources (Pagán- Berlucchi & Muse, 1983; Rigau-Pérez, 2013).

The Regional Era saw Puerto Rican stakeholders present conflicting visions of how best to balance providing care within the economic and political limitations of the period. On the one hand, the Puerto Rican government advocated for state-provision of economically-practical care through the SocialCare model, conceptualizing "quality" care as encompassing a streamlined,

[25] In 1950, wages in Puerto Rico were 28% of wages in the United States. By 1965, the difference had increased to 48% (Dietz, 1986). Low wages helped to attract U.S. firms to the island. It's also worth noting that from 1940 to 1989, Puerto Rico was not subject to the minimum wage set by the Federal Labor Standards Act (FLSA) in 1938, ostensibly due to fears that increasing insular wage rates might harm local industry. Anti-FLSA forces in Puerto Rico, including the presidentially-appointed governor and the resident commissioner, and "indifference, ignorance, or strategic silence" (Macpherson, 2017, p. 676) towards the fate of territories within the federal government resulted in Congress permitting some industries on the island to establish wage floors lower than those required in states. This was done with the legal caveat that the island's minimum wage rate not give island industries a competitive advantage over their United States counterparts (Congressional Research Service, 2008). As always, federal policy concerning Puerto Rico's economy was shaped to benefit the mainland.

sociomedical approach that improved healthcare accessibility for the entire population. On the other, Puerto Rican physicians employed their power of medical education and the free-choice philosophy of Medicaid and Medicare to incrementally replace SocialCare with a BioCare model that sought to combine universal access to state-sponsored care with medical modernism through public funding of expensive, privately-supplied biomedical treatment.

Even in wealthy metropole countries, resources are not unlimited, and quests to ensure universal access to care are always accompanied by strategic decisions about which medical services are universally accessible and under what circumstances. As will be discussed in more detail in the next section, the BioCare model failed to include a "balancing" mechanism for negotiating the reality that Puerto Rico's medical market was severely limited. Through BioCare, native physicians set in motion not only a transition of resources towards specialized services and private doctors' profit, but an escalation in public medical spending that was not accompanied by sufficient funding. At the same time, it must be acknowledged that in Puerto Rico, colonialism inhibited the kind of successful moral economy compromises that have been instituted by other nations. The contradictory ideals of biomedicine and government-guaranteed universal care underlying the BioCare were implemented by Spanish and United States colonial medicine during the 19th and 20th centuries, and federally mandated Medicaid and Medicare programs both permitted and encouraged BioCare's financially irresponsible philosophy. Perhaps if Puerto Rico had housed a smaller indigent population that could have more easily contributed to their own medical expenses, either through taxes or individual payment, BioCare's insistence on public funding of specialized treatment would have been less catastrophic. But Puerto Rico's economy was stunted by economic the exploitation and restriction of United States' imperialism, and the majority of the islands' population was reliant on an ever-dwindling

share of public money. BioCare's failure was not unrelated to its spending structure, but it seems imprudent to discuss financial irresponsibility within the BioCare model when the impact of colonialism looms so heavily over the provision of healthcare on the island. Eventually, BioCare and the weakened Regional System were replaced with a new attempt at balancing medical values with economic limitations: Reforma and GroupCare Pueblo.

The Reforma System (1993-Present): GroupCare Pueblo

Reforma refers to a sweeping 1993 healthcare law that replaced the weak remnants of SocialCare and the biomedical extravagance of BioCare with GroupCare Pueblo, wherein the Commonwealth government contracted with private, for-profit HMO's and tasked them with providing healthcare to the medically indigent. GroupCare Pueblo continued the colonial legacy of medical state paternalism by funding healthcare services through public money, and aimed to fulfill Puerto Rico's ideal of universal healthcare access. However, in contrast to the healthcare models of the Regional Era, GroupCare Pueblo's moral economy was predicated upon neoliberal principles, and it conceptualized private, for-profit managed care as best equipped to allocate resources in ways that improved healthcare quality, increased healthcare accessibility, and controlled healthcare spending.

GroupCare Pueblo represented a fragmented continuation of Puerto Rico's medical past that was both less accessible and more expensive. Like BioCare, GroupCare Pueblo administered publicly-funded medical assistance to the medically indigent through private doctors. However, it tasked for-profit insurers, rather than physicians, with making final decisions about patients' healthcare needs. Similar to SocialCare, GroupCare Pueblo sought to support economic efficiency through an emphasis on preventative services. Yet it did so by decreasing primary physicians' pay when patients utilized medical services, incentivizing medical rationing and

reducing the accessibility of essential specialized treatment. Furthermore, GroupCare Pueblo's goal of universal healthcare remained unrealized. In contrast with the Regional Era, where even under BioCare the weakened Regional System continued to serve patients for free, Reforma coverage was strongly means tested, leaving many low-income people uninsured. Finally, instead of promoting economic efficiency, HMO's administrative costs and profits increased healthcare spending on the island. Finally, officials intent on achieving universal healthcare continually expanded eligibility for the Reforma program, intensifying financial strain.

Local physicians' discontented with Reforma's threat to their finances, authority, and modernist medical standing advocated for alterations to GroupCare Pueblo that would more closely align with their economic and professional interests. When native doctors were unsuccessful in enacting these changes, they increasingly took advantage of their U.S. medical training and citizenship, leaving Puerto Rico in search of specialized education and better-paying, more prestigious opportunities on the mainland. As the availability of medical workers dwindled, the island's existing issues with healthcare accessibility worsened.

GroupCare Pueblo's failure to increase access to healthcare services and lower healthcare spending has been exacerbated by the island's colonial status. This unfaltering imperial relationship has meant the continuation of inequitable application of federal policy and funding to the island, encouraged local poverty and increased reliance on public healthcare funds, and facilitated physician brain-drain. As a result, Reforma and the GroupCare Pueblo model have culminated in an ongoing, island-wide healthcare crisis.

Practical and Ideological Shifts Towards Privatization

BioCare's expansion of the private medical market may have been pushed by local physicians and precipitated by Medicaid and Medicare, but it was also accompanied by broader

ideological shifts among political elites and the public connected to the island's dependence on mainland. While Puerto Ricans continued to advocate for citizens' right to healthcare, they began conceptualizing privatization as the best way to balance increasing access to care with limited resources. This neoliberal philosophy informed the creation of an entirely private healthcare system through Reforma and a GroupCare Pueblo approach to health whose focus on for-profit managed care ultimately contributed to the island's healthcare crisis (Mulligan, 2014).

Medicaid and Medicare drastically expanded Puerto Rico's small private medical market, allowing patients who had previously relied on the free public system to seek private medical options and have their visits paid for by the federal programs. Consequently, poor and elderly patients covered by Medicaid and Medicare began accessing private care. By spending federal and commonwealth money that would otherwise have been invested in the Regional System and its SocialCare model in the private market, Medicaid and Medicare gave rise to BioCare and its accompanying philosophy of public-funding, private-provision, and high-cost biomedicine. BioCare's strain on public healthcare funding was exacerbated by the tendency of wealthy and privately insured patients who were prescribed expensive services in the private sector to obtain them for free through the Regional System, either to avoid paying or because the treatment they sought was only available through Centro Médico. As BioCare built up the private system, the financial burden of specialized biomedical care was centralized in the public sector, which began experiencing serious funding shortages (Rivero, 2005; Mulligan, 2014).

Healthcare ideology across the island also shifted away from public provision of care. In fact, a 1973 government study suggested that rising healthcare costs could be better mitigated if healthcare was managed in a more business-like fashion, going so far as to recommend that the entire population be enrolled in private insurance plans as a way of treating healthcare like "any

other activity that involves investment and operational costs" (Puerto Rico Legislative Assembly, as cited in Mulligan, 2014, p. 42). While the report reaffirmed belief in healthcare as a human right by advocating for universal coverage, its recommendation that the goal of increased healthcare access and the reality of healthcare costs were best balanced through privatization was a harbinger of Reforma and the GroupCare Pueblo doctrine.

El Partido Popular Democrático (PPD), the political party that advocates for the continuation of Puerto Rico's commonwealth status, authored the 1973 report. However, support for privatization on the island during the 1970's and 1980's across a variety of state-run services was mainly propelled by the pro-statehood Partido Nuevo Progresista (PNP) (Colón Reyes, 2005; Silver, 2004). Mulligan (2014) sees the rise of neoliberal ideology in Puerto Rico as intimately tied to its struggles over its political status, stating that "the alignment of the [PNP] with neoliberal reforms [stemmed] in part from the desire to have Puerto Rico accepted by the United States," (p. 46) so that the island might be granted statehood. However, Puerto Rico's shifting conceptualization of how best to ensure citizen's access to care is attributable not only to the status question, but also to the way that the imperialistic enactment of Medicaid and Medicare created a context within which privatization flourished, biomedicine reigned, and patients, federal, and commonwealth funds were pushed into a BioCare model of care that placed the monetary strain of expensive biomedical services squarely on the island's public market. Although adopting a neoliberal ideology and implementing GroupCare Pueblo was in part a political strategy, it was also a response to an increasingly narrow set of options for healthcare reform in the face of underfunded federal policies that promoted privatization and allowed physicians' unrestrained access to biomedicine and public capital.

Enacting Reforma and Redefining "Quality" Care for the GroupCare Pueblo Model

In 1992, the PNP claimed a decisive political victory, winning a majority in the Puerto Rican Senate and House of Representatives and electing PNP-candidate Dr. Pedro Rosselló the new governor of the island (Barreto, 2001; Gaztambide-Geigel, 1994). By this point, the Regional System was in disarray. Patients reported overcrowding and long waits as a result of budget and staffing shortages, and the public system employed only 1000 physicians to the private system's 7000. As such, reforming healthcare through privatization was a central tenet of Rosselló's campaign (Hulme & Rios, 1998; Mulligan, 2007). The 1993 Reforma legislation and its GroupCare Pueblo approach reflected a reconfiguration of the cultural ideal of universal healthcare through medical state paternalism to fit with neoliberal principles. While the government would no longer function as a direct healthcare provider, the program's proponents contended that the state would continue to guarantee care by contracting with private insurance companies that would in turn provide indigent patients with medical services through private HMO's, which, much to physicians' chagrin, would control costs in part by de-prioritizing specialized services (Rosselló, 2000). Within GroupCare Pueblo, "quality" care was economically-preventative, broadly accessibly, privately-provided, and neoliberally-managed.

Reforma endeavored to provide universal coverage by insuring the medically indigent through private, for-profit medical insurance plans paid for and regulated by the government (Mulligan, 2010).[26] The state would fund this shift through the sale of public healthcare facilities and the redirection of money previously spent on the Regional System (Rivero, 2005). Puerto Rican residents earning up to 200% of the local poverty level were deemed eligible for the

[26] Puerto Rico was divided into eight geographical regions. Contracts were made with various for-profit private insurers, who then took over administration of care for Reforma recipients in their assigned region(s).

program, with those earning between 130% and 200% subject to a small premium (Hulme & Rios, 1998). To help control costs, the plan called for an HMO model with capitation; Reforma patients signed up with a primary care physician who received a monthly payment (capitation) for each patient they acquired. Under capitation, HMO's deducted money from physicians' payments when patients required specialized care, lab work, or medications, which continued to operate on a fee-for-service basis (Mulligan, 2014). Program creators expected that primary physicians' financial stake in the health of their patients would lower healthcare costs by motivating doctors to practice better preventative care, decreasing the number of patients who would need to access costly specialized services. Finally, a newly created public corporation, the Puerto Rico Health Insurance Administration (Administración de Seguros de Salud, or ASES), was responsible for negotiating and administering government contracts with private insurance companies as well as evaluating the system's effectiveness and protecting the rights of Reforma beneficiaries and providers (Rosselló, 2000). Separate from the Department of Health, the ASES was ruled by an executive board mostly made up of former insurance executives and businessmen (Santos- Lozado, 2013; Román de Jesus, 2002).

The dire need for healthcare reform limited opposition to Reforma (Rivero, 2005), but organized medicine resisted aspects of the system that threatened physicians' professional dominance, infringed upon their economic prospects, and downplayed specialized services and training. The AMPR derided the ASES's lack of medical experts, asserting that physicians better understood the necessary (and unnecessary) medical needs of Puerto Rico's population and were therefore less likely to implement duplication and wasteful bureaucratization that would raise costs and hinder patient's ability to obtain healthcare services (Román de Jesus, 2002; Santos-Lozado, 2013). They also expressed concern that the privatization of public hospitals might

disrupt medical education and residencies, suggesting that these hospitals should instead be given to medical schools in order to expand medical training options. Finally, physicians cautioned that capitation presented a conflict-of-interest for providers, shifting the financial risk for providing expensive care onto physicians and hospitals and dis-incentivizing the administration of important specialized services (Mulligan, 2014).

The AMPR's suggested amendments to Reforma were ignored, as unlike during the Regional Era when federal policies bolstered physicians' efforts to implement BioCare, their endeavors lacked institutional support. However, organized medicine's reaction to GroupCare Pueblo reveals how physicians' vision for balancing the right to "quality" healthcare with a finite medical market differed from the perspective of Puerto Rico's government. The government's GroupCare Pueblo philosophy used business experts, private insurance, and capitation to control costs and ensure access to "quality" care, which it defined as private, preventative, and economical by way of neoliberal-administration and curtailed use of expensive specialized services. In contrast, Puerto Rican physicians sought to increase economic efficiency by arming the ASES with biomedical experts, and framed "quality" care as centered around specialized, rather than preventative, medical services and training. Although doctors were unsuccessful in obtaining their biomedical version of neoliberal healthcare reform, their response to Reforma shows the continued influence of a U.S.-inspired biomedical culture on the island, and their dissatisfaction foreshadowed their exodus to the United States, where their aspirations of biomedicine, prestige, and profit could be realized.

Early Reforma Outcomes (1993-2010)

Through the privatization of the Regional System and the implementation of the GroupCare Pueblo model, Reforma aimed to control costs and ensure that all Puerto Ricans,

especially the medically indigent, had equal access to high-quality healthcare (Rosselló, 2000). However, most scholars agree that Reforma was unsuccessful in achieving these goals. The for-profit structure of the reform itself, which created an uninsured population, incentivized care-rationing, and increased administrative expenses, can be partially blamed for the Reforma's shortcomings. At the same time, federal policies pushing privatization, Puerto Rican medicine's long-standing colonial connection to medicine in the United States, and native doctors' commitment to their economic interests and devotion to medical modernist status-standards were also contributing factors to the system's failures.

Despite a concerted effort by the Puerto Rican government to use GroupCare Pueblo's HMO-model to ensure healthcare rights, privatization of the Regional System decreased access to care. Island officials made Reforma available to those earning up to 200% of the local poverty level, offering coverage beyond what was required by federal Medicaid legislation (Mulligan, 2014; Strand, 2008). While this provided health insurance for 40% of Puerto Ricans (PAHO, 2000), it also created for the first time in the island's history a class of uninsured individuals who did not qualify for the Reforma program (Lerman, 2019). Furthermore, Reforma patients to sign up for the program, and many eligible individuals did not do so. In 2009, a purported 8.3% of the island's population lacked health insurance coverage (Mulligan, 2014). Whereas during the Regional Era, anyone could access care regardless of ability to pay or insured status, uninsured patients under GroupCare Pueblo, most of whom were medically indigent and unable to afford medical care out-of-pocket, confronted organizational and financial barriers to obtaining healthcare services.

Capitation also proved an impediment to healthcare access. While the practice was intended to improve care and control costs by giving physicians a financial stake in their

patients' health, it ultimately resulted in the exact sort of care-rationing predicted by the AMPR. Doctors declined to refer Reforma recipients to specialized services that would eat into their incomes (Perreira et al., 2017). Furthermore, towards the end of the early Reforma period, established doctors began leaving the island in search of higher pay, better conditions, and more prestigious biomedically-focused posts on the U.S. mainland. The migration of physicians limited the availability of medical services on the island not only for Reforma patients, but also for wealthier individuals who were confronted with an ever-dwindling pool of practitioners (Perriera et al., 2017; Portela & Sommers, 2015). Health indicators from infant mortality rates to asthma, diabetes, and heart disease failed to improve, and access to specialized care, mental health, and emergency services were deemed inadequate by multiple government-sponsored and independent studies (Mulligan, 2014).

Reforma further diminished healthcare access by disrupting medical education in Puerto Rico and draining the island of opportunities for, and availability of, medical expertise. During the Regional Era, medical training in Puerto Rico was intimately tied to the public healthcare system, and UPR used regional hospitals and Centro Médico for educational and research purposes. As the Puerto Rican government privatized hospitals in the 1990's and early 2000's, the residencies associated with these institutions closed, diminishing opportunities for training and medical investigation (Mulligan, 2016). Centro Medico became the only facility completely funded by the government, and the primary provider of residencies on the island (Strand, 2008). Consequently, between 1993 and 2005, the number of interns and residents in Puerto Rico decreased by 68% as posts closed and Puerto Rican medical students were forced to seek positions in the United States. After training in the United States, many young doctors remained on the mainland, declining to return to the island's resource-poor medical arena (Portela &

Sommers, 2015). By pushing native medical talent to seek education and employment in the United States, Reforma diminished Puerto Rico's access to medical experts (Mulligan, 2014).

Finally, GroupCare Pueblo's business-oriented approach failed to lower healthcare costs. Healthcare-related expenditures steadily increased after Reforma's implementation compared to under the Regional System, rising from 3.6% of government spending in 1990 to 14.3% in 2004. By 2005, the island was spending 26% of its GNP on healthcare (Alm, 2006; Mulligan, 2014). Unfortunately, the government sale of public health infrastructure to private companies at the start of privatization failed to generate the projected profits, compounding the financial strain of increased healthcare spending (Muñoz Sosa et al., 2018).

Scholars have concluded that heightened healthcare costs on the island following Reforma can largely be attributed to the duplication of services and rising administrative costs associated with transitioning indigent patients from what was essentially a single-payer system under regionalization to one carried out by multiple HMO providers (Colón, 2005; Mulligan, 2014). However, contracting with for-profit insurers in particular may have played an important role in the failure to control medical spending on the island. Studies have found that for-profit insurance schemes result in higher administrative overhead than their nonprofit counterparts, and spend less of their operating revenues on medical care (Chernew & Mintz, 2021; Shen & Melnick, 2004; Treo Solutions, 2004;). Furthermore, contracting with private, for-profit HMO's meant that Reforma was paying not only for provision of care, not only for burgeoning administrative costs, but also for the pocketed profits of private insurance companies (Mulligan, 2014). While the ASES worked with insurance companies to determine the terms associated with Reforma, profit-seeking HMO's pushed for higher premiums and lower coverage responsibilities during the contract negotiation process, and allocated administrative resources to denying care

for their own material benefit. Many Reforma-contracted insurance companies saw huge profits; for example, in 1999, 37% of Triple-S's 1.1 billion in underwritten premiums was attributable to the healthcare reform (Rivero, 2005). This not only affected overall healthcare spending by leading to higher premiums, but may have also contributed to the lack of improvement in healthcare outcomes on the island, since money that might have otherwise been spent on medical services was instead allocated to administrative costs and profit-mongering.

Many scholars (Mulligan, 2014, Lerman, 2019, Santos-Lozada, 2013) attribute Reforma's failures to the reality that market-based reforms with a focus on making money are unsuited for managing health, deriding the GroupCare Pueblo perspective that neoliberal administration can ensure healthcare economization, quality, and universal access. Undoubtedly, the inadequacy of Reforma on multiple fronts supports this claim, as does the way that the system's failures echo many of the problems accompanying the neoliberal commodification of care in the United States. Scholars have noted that care-rationing and increased profit and administrative spending are part and parcel of U.S. medicine, and are tenuously sustained by the United States' resource-rich medical environment (Hoffman, 2012; Reich, 2016; Rylko-Bauer & Farmer, 2002; Woolhandler, Campbell, & Himmelstein, 2003). In contrast, Puerto Rico's healthcare arena is hobbled by colonialism and ill-suited for these bureaucratic and free-market expenses.

Mulligan (2014) points out that "colonial relations of rule have consistently interfered with the ability of Puerto Rican policy makers to design and implement a health system that responds to local conditions" (p. 227). In the case of GroupCare Pueblo, pathways to institutional provision of care were shaped and restricted by federal Medicaid and Medicare policy, local concerns about Puerto Rico's political status, a large medically indigent population, and limited

options for economic and healthcare revitalization under commonwealth regulations. These circumstances ultimately pushed the island to adopt neoliberal healthcare administration. Reforma took concrete steps to align universal healthcare access and neoliberalism, providing insurance beyond federal Medicaid regulations. However, the for-profit privatization encouraged by Puerto Rico's contemporary colonial context was ultimately incapable of successfully balancing universal access with insular market realities. Furthermore, the significance of GroupCare Pueblo's inability to ensure healthcare access to all Puerto Ricans must be understood in relation to Puerto Rican medical values. The "failure" of neoliberal managed care to provide universal healthcare access in the United States, where healthcare is conceptualized as a commodity, is fundamentally different from GroupCare Pueblo's inability to provide universal healthcare access in Puerto Rico, where part of the "local condition" (Mulligan, 2014, p. 227) includes an understanding of healthcare as a human right.

The colonial relationship between Puerto Rico and the United States also contributed to close institutional and cultural ties between Puerto Rican and American medicine that facilitated native doctors' exodus and exacerbated GroupCare Pueblo's problems. The islands' legacy of U.S. medical colonialism ensured that medicine in Puerto Rico allowed for the very kind of medical-talent-migration to the mainland precipitated by Reforma, with UPR and other island medical schools constructed to abide by AMA standards of accreditation that made it easy for Puerto Rican doctors, who are U.S. citizens, to transfer to the mainland. In addition, native doctors' historical and contemporary dependence on American-style biomedical notions of legitimacy drew them to the supra-special training opportunities and higher professional status that could be realized within the United States' well-stocked medical field. GroupCare Pueblo realized neither the ethical goal of government-ensured universal access to care, nor the cultural

ideal of modernist medical culture, nor the practical need to control healthcare costs. While these failures were due in part to the system's strategy of for-profit privatization, they were also linked with the island's United States colonial context.

Compounding Impacts of Federal Legislation: Medicare Updates, Section 936, and the ACA

Initial enactment of Medicaid and Medicare exacerbated Puerto Rico's dearth of healthcare and economic resources, offering the commonwealth less program funding than full states, facilitating BioCare, and making it increasingly difficult for the island to achieve universal healthcare through the public Regional System and rapidly dwindling public capital. Similarly, the policy exceptions and inferior access to federal funds with comparison to states built into Medicare updates and the Affordable Care Act (ACA) during the late 90's and 2000's also infringed on healthcare accessibility in the commonwealth. Combined with the island's economic subjugation to the United States and the related issue of high poverty rates, federal legislation during the Reforma Era failed to revive GroupCare Pueblo or move the island closer to universal healthcare.

In 1997, the federal government established Medicare Advantage (MA), which allows Medicare beneficiaries to receive Medicare benefits through private insurance companies instead of through the federal government. MA plans are disproportionally popular on the island, with 75% of Puerto Rico-based Medicare recipients choosing to participate in the MA program in 2016 compared with only 31% of beneficiaries in the United States (Levis-Peralta et al., 2016; Perriera et al., 2017). In part, this trend can be explained by the high rates of poverty on the island. Almost 50% of Medicare beneficiaries in Puerto Rico also qualify for Medicaid, and MA plans are usually less expensive than traditional Medicare, making them a more desirable option

for low-income seniors concerned about high premiums (Perriera et al., 2017). However, differential access to Medicare subsidies on the island may also play a role. Despite paying payroll taxes at the same rates as their mainland counterparts, elderly Puerto Ricans are ineligible for federal subsidies for Medicare Part D (passed in 2006), which functions to cover prescription drugs (Mulligan, 2014). Since, unlike Original Medicare, many MA plans include prescription coverage, these private insurance options are made even more attractive to indigent islanders that lack the means to purchase supplemental Medicare Part D insurance (Portela & Sommers, 2015; Shin et al., 2015).

Medicare Advantage is part of a larger neoliberal push towards privatization in the United States, and has been touted as improving the Medicare program by increasing coverage options for Medicare beneficiaries. However, MA plans have been increasingly criticized for resulting in high levels of denied care and spending caps that leave patients without adequate access to healthcare services (Miller, 2020). The popularity of MA in Puerto Rico, attributable in large part to the island's high poverty levels and unequal access to Medicare subsidies with comparison to states, has put elderly islanders at increased risk for denied care and lower access to health services.

The island's long-standing economic subjugation to the United States has been a major contributor to the very poverty that pushes Puerto Ricans into MA plans, and U.S.-related economic developments during the late 20th and early 21st centuries served to weaken the island's already fragile economy. Between 1996 and 2006, the Internal Revenue Service gradually eliminated Section 936 from the federal tax code, which had brought mainland investment to the island after its addition in 1976 by allowing U.S. corporations in Puerto Rico to store their profits in island banks and move them tax-free to the mainland after liquidating their

operations (Ayala & Bernabe, 2009). As a commonwealth without voting representation in Congress, Puerto Rico was denied meaningful democratic input on this change, which Feliciano (2018) estimates decreased the number of manufacturing establishments by 28% and accounted for the loss of 75% of manufacturing jobs relative to service sector industries.

The effects of removing Section 936 were magnified by the Great Recession, which Puerto Rico felt keenly due to its close economic ties to the United States. Consequently, the island saw a rise in outward migration to the mainland, which contributed to a population decline of 12% between 2004 and 2016 that undermined the island's tax base and diminished its labor pool (Abel & Deitz, 2014; Krogstad, Starr, & Sandstrom, 2017). Furthermore, Puerto Rico's still-relevant 1950 commonwealth agreement curtailed the island's ability to forge an independent path of economic revitalization, barring the enactment of protective tariffs that might stimulate local industry and disallowing the island from entering international commercial treaties. In this way, Puerto Rico's contemporary economic dependence on the United States, and its lack of power over federal economic legislation, paved the way for elderly Puerto Ricans to disproportionately rely on private MA plans that hinder healthcare access.

Changes to MA reimbursement calculations under the 2010 Affordable Care Act (ACA) further reduced healthcare resources and access. The ACA tied the MA reimbursement formula to the estimated cost of traditional Medicare in each state or territory, and researchers theorize that the unpopularity of traditional Medicare in Puerto Rico has skewed the island's reimbursement sample. In 2019, MA reimbursement on the island was 43% lower than in the United States, having dropped five to six percentage points each year between 2012 and 2017. Through changes to MA, the ACA threatened native doctors' capitation-battered incomes,

helped propel their migration to the United States, and worsened access to care on the island (Perreira et al., 2017; Richman, 2018; Roberts & Song, 2022).

In addition, differential application of ACA requirements and funds in Puerto Rico show a continued pattern of inequitable treatment by the federal government and prohibited the ACA from resolving Reforma's healthcare resource and accessibility issues. The ACA excluded Puerto Rico from the individual mandate, the employer mandate, entitlement funding for Medicaid expansion, and the ability to purchase insurance on the federal Marketplace (Portela & Sommers, 2015). Instead, the island received a series of one-time ACA-related funds, an increase to their Medicaid block grant, and an adjusted federal funding rate up from 50% to 55% (Balmaceda, 2022), money that accounted for only 15-20% of total Medicaid expenditures in Puerto Rico (Solomon, 2019). In 2014, the Centers for Medicare and Medicaid Services (CMMS) confirmed that insurance companies on the island were exempt from the guaranteed issue, prohibition of lifetime and annual limits, and coverage of preventative health services, ACA requirements aimed at increasing access to health insurance and healthcare (Portela & Sommers, 2015). The CMMS justified this decision by expressing reservations that the island's fragile healthcare market, strained by funding shortages and poverty intimately connected with the colonial nature of its ties to the United States, could withstand the stress of ACA rules. Despite its exclusion from the ACA's accessibility-improving requirements, Puerto Rico chose to honor them, and even went on to expand Medicaid despite being denied federal entitlement funding. As Portela & Sommers (2015) note, Puerto Rico "aggressively offered coverage to its low-income population… far beyond… many U.S. states" (p. 7).

As the ACA provided greater (if inequitable) resources by raising the island's block grant, the Puerto Rican government responded by taking steps to better align healthcare access

on the island with local social values and the moral economy behind the GroupCare Pueblo model without challenging Reforma's neoliberal organization, increasing the accessibility of private insurance coverage to both indigent (through expanded Medicaid recipients now covered by Reforma) and non-indigent (through implementation of ACA regulations) patients. The commonwealth government's response to the disparate application of ACA legislation in Puerto Rico exemplifies a persistent belief in the government's responsibility to ensure healthcare access. While the expansion of services during this period was in no way the leading cause of the islands' eventual healthcare crisis, attempts to improve healthcare accessibility further stressed the island's already under-funded healthcare sector.

Puerto Rico's Healthcare Crisis (2010-Present)

The neoliberal reform of Puerto Rico's healthcare system, differential application of Reforma-era federal legislation relative to states, and the migration of native doctors' to the mainland has culminated in an island-wide healthcare crisis. Puerto Rico's present-day medical situation is characterized by decreased access to specialized services as care is rationed medical and doctors move to the United States. An enduring rise in healthcare costs as for-profit, private insurers expand administration and pocket premiums has been accompanied by a corresponding shortage of healthcare funds that have contributed to the bankruptcy of the Puerto Rican government. Moreover, the island's healthcare complications have been followed by federally-mandated austerity measures that reemphasize the island's colonial relationship to the United States. Federal response to the island's bankruptcy has complicated its ability to realize government-guaranteed universal healthcare by further restricting limited healthcare funding and wrenching authority of the commonwealth's budget away from the island and into federal hands.

As Puerto Rican doctors seek educational and employment opportunities in the United States, Puerto Rico is experiencing an acute physician shortage. Seven-thousand doctors left the island between 2010 and 2015, with nearly 600 moving to the United States in 2016 (Javier Pérez, 2017). Moreover, Puerto Rico has reported a drop in newly registered physicians (Styloar, 2020). Lack of residencies and research opportunities,[27] lower wages due to capitation and low Medicaid/Medicare reimbursement rates, poor work conditions within an underfunded system, and easy access to the United States have all been identified as potential push factors supporting medical migration (Páres Arroyo, 2021; Perriera et al., 2017; Portela & Sommers, 2015). Furthermore, Puerto Rican physicians increasingly refuse to accept patients with Reforma coverage, citing low wages and delayed payments through the Reforma System (Perriera et al., 2017). Doctors' movement to the resource-rich mainland and rejection of Reforma contracts allows them to fulfill American-style ideals of biomedical prestige and profit, since they have been unable to realize these desires within the GroupCare Pueblo model. However, as a result of these developments, healthcare access on the island has suffered. Seventy-two out of the island's seventy-eight municipalities were designated medically underserved in 2015, and patients as well as the ASES have reported increased difficulty in obtaining specialized care and emergency services (Mulligan, 2014; Respaut, 2016; Shin et al., 2015).

Rising healthcare expenditures, lack of federal financial assistance, and high levels of economic need are also essential features of Puerto Rico's larger fiscal crisis. In 2015, when Partido Popular Democrático (PPD) Governor García Padilla declared that the Puerto Rican

[27] Parés Arroyo (2022) reports that in 2021, 390 students were admitted to medical schools in Puerto Rico. That same year, there were only 278 first-year medical residencies. Moreover, Puerto Rican students compete with students from the United States and abroad for residency spots.

government was bankrupt and unable to pay the $72 billion it owed to mainland creditors, much of the debt was attributed to the island's large Medicaid expenses (Thielman, 2015; Varney & Rodriguez, 2018). In response to the island's financial predicament, the United States instituted the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA), which established a Washington-appointed Financial Oversight and Management Board (FOMB) with authority over the commonwealth's budget. Many Puerto Rican politicians, academics, and residents saw the FOMB as reaffirming the island's colonial status. Reminiscent of pre-1948 Puerto Rico, when the island's governor was presidentially-appointed, and pre-1917 Puerto Rico, when the island's congressional bodies were federally appointed, and 1898, when the island's civil rights were ceded to the United States after the Spanish-American War, FOMB board members are appointed by the president, a federal figurehead for whom Puerto Ricans cannot vote. Neither the Puerto Rican governor nor the island's legislature have input over selecting FOMB members. Neither can they override its decisions, regardless of whether those decisions are contrary to the governor's, legislature's, or general Puerto Rican public's policy preferences (Cabán, 2018). Predictably, the board has implemented $840.2 million in Medicaid cuts to be enacted by 2023 (Varney & Rodriguez, 2018); the FOMB, instituted by a U.S. government where Puerto Ricans have no voting representation, was authorized to undo decades of Puerto Rican efforts to expand healthcare access.

Reforma and its GroupCare Pueblo approach to health function as a neoliberal reimagining of government-ensured universal care, wherein privatized managed healthcare inspired by U.S.-style neoliberalism and necessitated by increased privatization following Medicaid and Medicare is utilized to provide healthcare coverage to Puerto Rico's indigent patients. However, the systems' efforts have been systemically frustrated by U.S. colonial

economic restrictions and unequal federal healthcare funding with comparison to states. Furthermore, because Reforma's resource shortages coincide with the strong ties of Puerto Rican medicine to medicine in the United States, and GroupCare Pueblo's preventative, economical focus is adversarial to physicians' desire for American-style biomedical prestige and increased profits, native physicians have left the island for educational and career opportunities on the mainland and further limited access to medical care. GroupCare Pueblo's financial strain has resulted in overt federal control of healthcare access on the island through the PROMESA board, which unilaterally imposed limits on Medicaid spending. While the specific neoliberal policies that Puerto Rican officials enacted, including contracting with for-profit companies, capitation, and the sale of public hospitals that formerly housed medical residencies, undoubtedly contributed to Reforma's failures, the question remains: to what extent could Puerto Rico design any healthcare system, private or public, biomedical or preventative, neoliberal or government-managed, that would succeed in balancing universal healthcare within the limitations rendered by the island's political and economic subjugation to the United States?

Conclusion

SocialCare, BioCare, and GroupCare Pueblo represent three attempted institutional solutions for balancing Puerto Rico's contradictory ideals of healthcare as a government-guaranteed human right, doctors' commitment to a modernist medical culture, and the reality of limited resources. Under SocialCare, the Puerto Rican government created an entirely public, universally-accessible system that functioned by equating "quality" care with economically preventative, sociomedical practice. Under BioCare, Puerto Rican physicians used United States' federal policy to construct a publicly-funded, privately-provided healthcare model economically beneficial to doctors, and moralized these changes by defining "quality" care as broadly

accessible biomedical treatment. Finally, under GroupCare Pueblo, pro-statehood Partido Nuevo Progresista (PNP) officials established a U.S.-style, for-profit, managed care approach. This model was made economical through de-emphasis of specialized services and the "business-like" practice of capitation, and defined "quality" care as both preventative and neoliberally-administrated.

The failure of each of these models is attributable in part to island actors, and island decisions. SocialCare was undoubtedly impacted by local physicians' antics around ensuring their influence, finances, and access to biomedicine, and BioCare's unviability was built into its model by native medical workers, as the economic component of its moral economy unsustainably increased public healthcare spending. Similarly, the neoliberal foundations of GroupCare Pueblo proved singularly catastrophic to both healthcare accessibility and cost-saving.

At the same time, any analysis of healthcare in Puerto Rico is incomplete without recognizing how medicine on the island is impacted by its historical and contemporary colonial context. The contradictory nature of Puerto Rico's medical value system, which includes a belief in both biomedical superiority and universal care that served to impede moral economy compromises during the Commonwealth Era, is attributable to its origins as a tool of Spanish and United States' colonial domination.[28] Consequently, the actions of native doctors with regards to the gradual dismantling of SocialCare, and their accessibility-threatening migration following GroupCare Pueblo, were enabled and encouraged not only by present-day federal policies, but also by an ongoing colonial legacy of cultural and institutional dependence on American medicine for legitimacy. Puerto Rico's current lack of democratic input on federal legislation

[28] See Chapter 2.

means that federal healthcare policies often directly undermine the island's healthcare objectives, as was the case with Medicaid and Medicare, or provide inequitable funding with comparison to states, as was the case with Medicaid, Medicare, and the ACA. Finally, Puerto Rico's subjugation to the United States manifests not only through disadvantageous federal healthcare policies, but also by way of federal economic constraints that leave the island fiscally vulnerable and frustrate its efforts to provide care. The island's long-standing economic dependence on the United States, and its inability to control its economy through tariffs, commercial treaties, and input on federal economic policy, contribute to high local poverty levels and an elevated need for public healthcare resources, which neither the islands' indigent tax base nor its lackluster federal funding can provide. Furthermore, Puerto Rico's weak economy and large needy population make legislation like Medicaid and Medicare Advantage that target low-income individuals more impactful, and therefore territory-specific limits on federal funding are felt more keenly.

The healthcare crisis ensuing from these factors reflects the experiences of other countries in the Global South, where neocolonial relationships shrink local economies and limit viable options for healthcare provision and reform (Igene, 2008; Packard, 2000; Stuckler, 2008), and has helped create an increasingly fraught work environment for Puerto Rican physicians. Doctors in Puerto Rico must grapple with the challenges presented by a large indigent population, capitation, low Medicaid and Medicare reimbursement rates, and a lack of access to medical resources, technology, and training. Chapters 4 and 5, based on 37 interviews with Puerto Rican doctors on and off the island, explore how Puerto Rican physicians understand, respond to, and moralize their responses to these difficult circumstances.

Chapter 4: Professional Identities in Colonial Crisis

Puerto Rico's modern-day healthcare crisis is the culmination of decades of attempted institutional solutions for balancing 1.) the colonially-influenced medical ideal of healthcare as a government-guaranteed human right, 2.) native doctors' belief in American-style biomedical superiority, and 3.) Puerto Rico's limited healthcare resources. As discussed in Chapter 3, insular actors have contributed to the island's healthcare problems. However, the process by which Puerto Rico's three Commonwealth Era healthcare models were institutionalized, moralized, and defeated reveals that Puerto Rico's colonial relationship to the United States has been a decisive factor in weakening the island's medical sector.

SocialCare, the Puerto Rican government's 1960 universally accessibly, regional healthcare model, defined "quality" care as economical, preventative, and sociomedical. It was undermined not only by native physicians financial and professional interests, but also by support for their interests by Medicaid and Medicare, federal legislation for which Puerto Rico had no democratic input. Subsequently, BioCare improved physicians' occupational control and economic prospects by defining "quality" care as expensive biomedical treatment. However, this model was unsustainable not only because of its costly nature, but also because the island's public healthcare funds were already taxed by inequitable financing for Medicaid and Medicare, and because Puerto Rico's imperially weakened economy created a large indigent population dependent on public medical money. Finally, GroupCare Pueblo moralized the institutionalization of private, profit-oriented, managed care by emphasizing the governments' continued role in ensuring the right to medical services and defining business-like, capitated, preventative medicine as the best way to improve healthcare quality and accessibility. This moral economy was heavily influenced by a U.S.-led push towards neoliberalism. Along with Puerto

Rico's continued economic instability, lack of federal healthcare funding, and close connections to American medicine, Reforma led to care-rationing, resource shortages, migration of native doctors to the United States, and increased healthcare costs through administrative and profit expenses. Contradictions within GroupCare Pueblo's moral economy abound, not only in relation to healthcare as a right versus healthcare as a commodity, but also with regards to native physicians' colonial legacy of dependence on American medicine and commitment to modernist biomedical principles. In combination with the island's exploitative economic, political, and medical ties to the United States, Reforma has thrust Puerto Rico and its medical workers into an environment of prolonged medical distress, complicating the "relational work" necessary to resolve moral economy mismatches between social values and economic realities.

I use professional identity as a conduit for understanding how Puerto Rican doctors experience and make sense of moral economy contradictions within Puerto Rico's crisis-laden, colonial healthcare context. More specifically, this chapter draws on interviews with Puerto Rican physicians on and off the island to examine how doctors position themselves with respect to the healthcare crisis, exploring how they construct professional identities that help them navigate contradictions between the institutional constraints of the Reforma System, the hegemonic influence of United States medicine, the fallout of economic crisis and United States' federal policy on the island's healthcare sector, and their own medical values of biomedical superiority and broad healthcare access. In doing so, I uncover the negotiated meanings underlying the "relational package"[29] (Zelizer, 2012) through which Puerto Rican doctors engage in medical work.

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[29] Zelizer (2012) defines "relational packages" as consisting of 1.) Social ties, 2.) Economic transactions, 3.) Representations of the right to goods and services (such as money or time), and 3.) participants' understandings of transactions/media.

In describing the healthcare crisis, doctors expressed professional identity tensions around the inconsistencies inherent in their connection to Puerto Rico's stigmatized, resource-poor medical sphere, their existence as dependent subsidiaries of the United States' prestigious, well-stocked medical ecosystem, and their ideal of easily-accessibly, high-cost biomedical care. Physicians based their interpretations of the islands' situation on direct and explicit comparison to medicine on the mainland, centering the island's healthcare difficulties around reduced access to medical equipment and specialists, low pay, and the inappropriate power of profit-driven Reforma insurance providers and self-interested governments over doctors' salaries and medical treatment. In addition, regular clinical interactions with indigent patients meant that physicians saw Puerto Rico's economic and healthcare crises as intimately connected, and recognized how sociomedical overlap complicated both the availability and efficacy of American-style biomedical solutions to patients' problems.

Lo (2005) suggests that professional identities are constructed when physicians "come to terms with the meaning of their racial, ethnic, or gender identities in the context of their professional institution" (p. 393). In order to reconcile their position as Puerto Rican practitioners within American medical hegemony and manage the challenges Reforma and the healthcare crisis posed to their professional lives, doctors on and off the island drew from Puerto Rico's foundational moral framework, reconfiguring a colonial legacy of healthcare as a right, medical modernism, and American medical supremacy to redefine their ties to the island's resource-poor medical sphere as professionally advantageous. Through their descriptions of the healthcare crisis, Puerto Rican physicians conceptualized "quality" care and medical prestige as emanating not only from American medical standards and credentials, but also from deployment of innovative approaches to improving the accessibility of biomedicine. Consequently, Puerto

Rican doctors on both sides of the Caribbean were able to cast the inventive flexibility garnered through their Puerto Rican medical experiences as emblematic of their superiority to their rigid U.S peers, cultivating a professional identity that presented Puerto Rican physicians as creative, higher-caliber, American-standard-achieving practitioners capable of providing biomedical treatment under any circumstances. Moreover, island-based doctors leaned on their dedication to "doing more with less" to position themselves as medical heroes devoted to the protection of patients' health and biomedical access against callously business-oriented Reforma insurers, justifying their calls for higher salaries and greater occupational control in part by implicitly linking providers' interests with improved healthcare outcomes. By centering their professional identities around achievement of American medical standards, island-centric creativity in biomedical care provision, and, in the case of island doctors, selfless protection of biomedical access against capitalist forces, Puerto Rican providers made sense of the contradictions between their idealization of biomedicine and broad healthcare availability and the medical market and professional status limitations accompanying the U.S. medical ecosystem within which they operated. In doing so, doctors reinforced U.S. medical dominance while also creating space for Puerto Rican medical exceptionalism.

At the same time, physicians' identity narratives were interrupted when their efforts to limit their workload to high-status medical activities and ensure access to American-style biomedicine were thwarted by personnel shortages and economically disadvantaged patients. Providers attempted to manage identity breaks in part by separating "social" problems that should be dealt with outside of the clinic from "medical" problems for which they were professionally responsibility, and advocated for non-clinical, community solutions to the islands' economic crisis. At the same time, doctors overtly recognized the negative impact of patients'

social problems on health and medical practice. Puerto Rican physicians' identity interruptions brought into sharp relief the incompatibility of Puerto Rico's colonial legacy of biomedical superiority with the islands' colonial medical market limitations, and illustrate the need for a sociomedical approach to health in Puerto Rico.

Professional Identity and the American Medical Hierarchy: Doing More With Less and Creative Biomedical Practice

Low salaries and a dearth of medical supplies, in particular biomedical resources, were described as central attributes of the healthcare crisis by most Puerto Rican physicians. Doctors understood these developments as both philosophical and material threats to their professional status and legitimacy within the American medical arena, as they were representative of Puerto Rican practitioners' marginalization and made technologically-heavy, American-style medical practice difficult to accomplish. Physicians on and off the island interpreted income and resource scarcity through a professional identity narrative that highlighted their American medical credentials and dedication to providing care in accordance with American medical standards, but also emphasized how their connection to Puerto Rico's healthcare crisis, which engendered them with the ability to creatively ensure biomedical access, was a professional advantage over their American counterparts. More specifically, doctors presented Puerto Rican practitioners as resourcefully superior, American-medical-standard-achieving, biomedicine-providing innovators. This self-concept that served to make sense of Puerto Rican physicians' stigmatized ties to the island, subsummation to U.S. medicine and its biomedical fixation, and colonial legacy of idealizing modernist medicine.

Low Pay and Managing Professional Legitimacy Through American-Credentialed Resourcefulness

Most Puerto Rican physicians mentioned low pay as an important facet of the healthcare crisis. Through discussions of limited income, Puerto Rican doctors on and off the island revealed adherence to a self-concept based on superior, resourceful compliance with American medical standards in the face of barriers to care provision. Physicians protected their claims to professional legitimacy by leaning on their connections to American medicine and recasting their ties to Puerto Rico's struggling medical field, which taught providers to "do more with less", as a professional asset. Through descriptions of salary deficits, Puerto Rican doctors demonstrated that their professional identity narratives served to assuage tension between their professional marginalization within the American medical sphere in ways that reinforced American medical hegemony while also elevating a uniquely Puerto Rican brand of medical practice.

While some doctors described the practical stressors associated with this trend, including struggling to afford the costs associated with running a practice while also financially supporting their families, discourse around income was more likely to center on direct comparisons with the earnings of doctors on the mainland. Puerto Rican physicians on and off the island indicated that they perceived the discrepancy between island and mainland salaries as an implicit negative judgment of their professional legitimacy. As Texas-based, UPR-trained, family physician Dr. Jiménez explained:

> It's the federal government's responsibility, to a large extent, because they don't give us money, they don't support us adequately. In Puerto Rico, we as doctors get paid less than half, even one-fourth of what the poorest states' doctor is getting paid for Medicare. For the same services. So I'm the same doctor, I'm trained in American-accredited schools. Why won't I get paid the same as any other doctor? We don't get a fair allowance. And one of the reasons is that we're not a state.

Dr. Jiménez analyzed Puerto Rico's inequitable financial treatment by the federal government from the perspective of doctors' individual salaries, specifically mentioning low Medicare reimbursement rates on the island with comparison to the mainland. By asserting that his own medical credentials were identical to those of doctors trained in the United States, Dr. Jiménez insinuated that he understood inferior Medicare payments as indicative of a broader perception of Puerto Rican physicians as less qualified, and less legitimate, than their U.S. counterparts. Dr. Jiménez justified his entitlement to higher pay by highlighting his American-accredited medical education, illustrating how Puerto Rican physicians on the island and mainland drew on their formal ties to American medicine when their professional authority was challenged.

Dr. Manuelo, a San Juan-based gynecologist, made similar appeals to American medicine when describing frustration over how his salary in Puerto Rico compared to that of doctors in the United States:

> They measure us according to American medical standards. You have less resources, less time, but you need to reach the same level of service that patients receive in an American hospital. However, the pay…it's nothing what they give you. They don't pay the same for the same services. (translated from Spanish)

While Dr. Jiménez mentioned that doctors in Puerto Rico provide "the same services" as doctors on the mainland, he focused on emphasizing how his American credentials were equal to those of physicians in the United States. In contrast, Dr. Manuelo highlighted that practitioners on the island not only practice the same procedures as U.S-based medical professionals, but also achieve "the same level of service" for less pay, and with fewer resources. On the one hand, Dr. Manuelo's statements illustrate how Puerto Rican doctors asserted their professional worthiness through their ties to U.S. medicine, a defensive strategy that associated professional legitimacy with the United States and served to reinforce American medical hegemony. On the other hand,

in acknowledging the adversity doctors on the island overcame when providing an American standard of care, Dr. Manuelo exemplified how Puerto Rican physicians used the healthcare crisis to both defend their professional authority and distinguish themselves favorably from their American counterparts. Dr. Manuelo's remarks imply a sort of Puerto Rican medical superiority owing to their ability to "do more with less;" not only were physicians in Puerto Rico held to the same standards, and providing the same care, as physicians in the United States, they were doing so while working with limited supplies. Through this characterization, Dr. Manuelo endorsed a professional identity that cast Puerto Rican physicians as high-caliber physicians whose resourceful ability to achieve American medical standards in the worst of circumstances made them better than U.S. doctors.

Use of professional ties to Puerto Rico's sparse healthcare environment when defending and, more surprisingly, elevating professional status stood in direct contradiction to physicians' repeated acknowledgement that their Puerto Rican medical background posed a threat to professional legitimacy within the U.S. medical sphere. For example, when responding to the question of "Why" island doctors receive lower salaries in his above commentary, Dr. Jiménez referenced Puerto Rico's lack of statehood, linking inferior pay, and the subordinate professional status inferior pay signified, with what he described as the United States' "imperialistic" relationship to the island. For Dr. Jiménez, professional legitimacy was inextricably bound to his position as a Puerto Rican physician operating within an American-centric colonial context. The stain of his professional connections to Puerto Rico remained even after moving to the mainland, as exemplified through a discriminatory encounter with one of his Dallas-based patients:

> I was like "Oh, I studied in Puerto Rico," and they're like "Well, we trust you." *(sarcastically)* Well I'm glad you trust me because I did have my boards, just like a graduate from Harvard. It's the same test, I passed it, first time, just letting you know.

Dr. Jiménez's anecdote illustrates that professional ties to Puerto Rico represented a persistent liability to Puerto Rican physicians' professional legitimacy, whether they be on the island and subjected to salaries incongruent with those of American doctors, or on the mainland and directly questioned by doubtful patients. Just as when he reacted to Puerto Rico's low Medicare reimbursement rates, Dr. Jiménez invoked American credentials when his patient challenged his professional authority on the basis of his island-based medical education. However, he also described his time working in Puerto Rico as a professional advantage:

> In Puerto Rico, the conditions are so different, and you have to work so much harder. When you come [to the mainland] it's like "Oh, really, is this your problem, this is what you complain about? This medicine? This is nothing." It does make you shine in the long run, coming from a more difficult situation.

Dr. Manuelo and Dr. Jiménez defended their professional qualifications against the blemish of Puerto Rico's medical field by emphasizing their formal connections to the bureaucracy of American medicine and their commitment to standardized American-style medical care. However, they also conceptualized the difficult conditions they faced on the island as imbuing them with a higher caliber of medical practice than U.S. practitioners who lacked similar experiences and were unable to function effectively in less-than-ideal circumstances. In doing so, both doctors promoted a professional identity that presented Puerto Rican doctors as premium practitioners with a resourceful ability to practice American-style medicine regardless of the obstacles, and suggested their medical skills far surpassed their U.S. peers.

Physicians' narratives around low pay and professional legitimacy illustrate how doctors reconciled their marginalized position within U.S. medicine. Doctors relied on their American professional credentials to equate themselves with their American counterparts. At the same time, they used their relationship with Puerto Rico's struggling healthcare sector to distinguish and elevate themselves in comparison with U.S. physicians. In order to make sense of the

contradictions inherent in their colonial professional existence, Puerto Rican doctors constructed professional identities that managed the threat their ties to Puerto Rico posed to their professional legitimacy within American medical hegemony not only by leaning into the American-ness of their medical skills, but also by presenting themselves as possessing superior medical proficiency derived from their stigmatized, island-based professional development.

Making Up for Resource Shortages: Superiority Through Biomedical Creativity

Most physicians reported that their ability to provide medical care in Puerto Rico was impacted by an endemic lack of medical resources across the island's healthcare sector. Like discussions of low pay, resource shortages were often presented in comparison with the United States, and used to promote an image of resourceful Puerto Rican medical superiority. However, physicians' discussions around lack of healthcare material promoted a professional identity that defined Puerto Rican doctors as not only resourceful in their achievement of American standards, but also creatively capable of supplying biomedical treatment to their patients regardless of the situation.

In framing their experiences with scarce medical supplies, doctors articulated a sense of prestige specifically concentrated around an island-cultivated brand of creativity:

> We're used to over-surge capacity on a daily basis. If the patient isn't that sick, they wait out in the waiting room for their medications. If you put U.S. nurses to work here, they would freak out, because they're used to the patient being in the room until discharged. But since we're used to seeing more patients than we can accept, we just do it. (Dr. Flores, Emergency Physician, San Juan, PR)

In this exchange, Dr. Flores described how he dealt with a chronic shortage of space in the emergency room by improvising, using the waiting room as an extension of the clinic. He compared this necessarily innovative style of practice with the rigid and uncompromising approach to medicine common in the United States, where medical professionals "freak out"

when confronted with less-than-ideal circumstances. Dr. Flores communicated an aura of superiority to U.S. practitioners not only in the way that he and his fellow Puerto Rican doctors made do with limited room, but also in the creativity with which they identified solutions to medical insufficiencies.

While Dr. Flores's example was focused on material practicality, most doctors discussing innovation in the face of resource shortages centered their narratives around ensuring patients' access to biomedicine. For example, pediatrician Dr. Rodríguez explained:

> In the hospital where I trained, we lacked certain resources that they have in hospitals in the United States, and so you have to be more creative. You know, you need to provide your patients with medication. We didn't have a CT scan, or a proper MRI, and it was hard to get labs in a timely manner. We often had to send patients to a different hospital, because there were times when we needed technology for an emergency and we didn't have it. I think that gifted me the ability to act without a lot of resources. (Dr. Rodríguez, Pediatrician, Naranjito, PR) (translated from Spanish)

Dr. Rodríguez admitted that his ability to tend to patients during his residency was complicated by a lack of supplies. However, like Dr. Flores, he understood the ingenuity these circumstances required as making him a better doctor, implicitly elevating his strenuous medical education in comparison with the less arduous experiences of physicians in the United States. Moreover, he illustrated his medical skill in biomedical terms, describing how he employed inventive strategies for getting his patients access to medication, MRI's, and CT scans. In doing so, Dr. Rodríguez affirmed his commitment to American-style biomedicine in line with Puerto Rico's colonial legacy of U.S.-led professionalization and present-day subsummation under American medical hegemony, but expanded the prestige associated with a biomedical approach to incorporate creative allocation of biomedical tests and treatment. Dr. Serrano, a Puerto Rican surgeon practicing in Florida, expressed a similar perspective:

> In Puerto Rico, sometimes we wouldn't have one instrument or another. Well, we would find a way of dealing with it! You would just invent something, find alternatives. Here in

> the United States, if [surgeons] don't have the perfect instruments, they won't take the case. For me, that's ridiculous. Maybe it's more difficult, if I don't have something specific, but I can do it anyway, with good results. In Puerto Rico, with the resources we had, we could do anything. (translated from Spanish)

Dr. Serrano criticized his American co-workers for their refusal to operate without the "perfect" supplies, contemptuously explaining that his time in Puerto Rico taught him to "adapt" to less-than-ideal medical contexts to ensure that his patients had access to necessary surgeries. Furthermore, he was adamant that even when "inventing" alternatives that secured provision of biomedical services, he still succeeded in producing favorable outcomes for his patients, further elevating himself with comparison to U.S. physicians. Drs. Rodríguez and Serrano's melding of innovation in the face of adversity and relentless pursuit of biomedicine was a common refrain among Puerto Rican physicians, who presented this curious coupling as a testament to their medical prowess. In doing so, they reformulated their stigmatized position within the American medical hegemonic context in which they practiced, framing their connection to Puerto Rico's resource-poor healthcare arena as a professional advantage in comparison to their American counterparts but retaining their commitment to an American biomedical framework. Furthermore, in their discussions of resource shortages, doctors expanded their professional identities beyond simple superiority through resourcefulness, more specifically centering their self-concepts on high-caliber, island-engendered creativity that enabled them to effectively ensure patients' access to biomedical care.

For-Profit Healthcare and Island Doctors as Defenders of Quality Care

In addition to comparing the salaries and resources of doctors in Puerto Rico with those of practitioners on the mainland, physicians on both sides of the Caribbean framed their frustrations around income and resource shortages on the island by describing what they perceived to be a diversion of Puerto Rico's healthcare funds away from patients' health and

towards the monetary aspirations of for-profit Reforma insurance companies and the selfish interests of the federal and commonwealth governments. Physicians on the island defined themselves as heroic guardians of patients' well-being against profit-motivated entities, and framed their requests for higher income, greater autonomy, and increased access to biomedicine around improving patients' health. In doing so, providers on the island defined "quality" medicine as widely accessible biomedical treatment provided by doctors with a high degree of occupational control. A professional identity narrative centralized around safeguarding the attainability of biomedical care allowed Puerto Rican physicians to make sense of the contradiction between a colonial legacy that encouraged idealization of healthcare as a right and biomedical superiority, a current U.S. colonial context that necessitated adherence to American-style medical treatment, and a capitalistic managed care system accompanied by a severely limited medical market.

No hay crisis de médico, hay crisis de plan medico[30]: Island Doctors as Biomedical Bulwarks Against the Business of Reforma

For Puerto Rican physicians, for-profit Reforma insurance companies were the most pervasive, problematic feature of the Reforma System and the broader healthcare crisis. For example, despite describing the incongruence between his modest salary and the high-level of service he provided in terms of comparison to American doctors, Dr. Manuelo passionately reported exactly where he believed the island's medical capital was being spent:

> …the pay…it's nothing what they give you… And then who's making money? The insurance companies. They pay the minimum, and then they go make 10 more insurance companies instead of making companies that provide services to patients. (Dr. Manuelo, Gynecologist, San Juan, PR) (translated from Spanish)

[30] "No hay crisis de médico, hay crisis de plan medico." There is not a crisis of physicians, there is a crisis of medical plans.

In this excerpt, Dr. Manuelo explained that money that could have been spent on improving island-based physicians' incomes was instead invested into expanding the reach of insurance companies. Although the neoliberal moral economy of Reforma and GroupCare Pueblo[31] framed for-profit managed care as the best way to improve the accessibility and quality of healthcare on the island, Dr. Manuelo saw the money-making aspirations of insurance entities as antithetical to the provision of medical services. By pairing his low salary with patient-centric criticism of the island's insurance market, Dr. Manuelo constructed a dichotomy between the role of physicians as arbiters of patients' health and the role of insurance companies as self-interested capital-hoarders, justifying dissatisfaction with his income by insinuating that patients' needs were best served by increasing provider salaries.

Dr. Manuelo's description of Reforma insurance companies as greedy beneficiaries of the healthcare system was a common sentiment among doctors. As one Florida-based cardiologist explained, "Reforma is nothing more and nothing less than Medicaid, and in Puerto Rico, we let those plans line their pockets and pay their investors with the money meant to provide services for the patient." Many physicians described a pattern of unscrupulous practices by Reforma insurance providers, including dropped contracts, refused coverage, and withheld payment. Doctors characterized these behaviors as prioritizing profits over patients' well-being:

> Let's say they have 90 days to pay us for the service that we gave to the patient. Close to the 90 days, Reforma would say "No, this billing is wrong. It needs to be resubmitted because the codification is not right, or because this X comma here." Every time we submitted our bill, they would deny it, and they had 90 days again to pay it back. So all of those 90 days started piling up, and I didn't get paid. I tried to keep my clinic running, but things started falling through the cracks. (Dra. Mejía, Pediatric Rheumatologist, New Haven, CN)

[31] See Chapter 3.

> They are business-people. When they have a physician that they think is costing too much, they don't want them. But I have patients with HIV with very expensive medication. I'm not going to take away their medication to save the medical plan money. A few months ago, one of the companies canceled my contract. They didn't tell me why. But I think it's because I had a complicated patient from that insurance plan in the hospital for like three months. (Dra. Torres, Internal Medicine, San Juan, PR) (translated from Spanish)

> [The medical plans] will tell you, all of a sudden, that they're going to eliminate medication from their coverage. They did this recently with some blood pressure medication. They took away an expensive one and only left the cheapest options. Well, I had a bunch of patients on that medication, so I had to change it. But the new medication, it takes time for it to start working in your system. And by then, the patient's blood pressure could be out of control! And you have to deal with that. You have to find a way of doing what's best for the patient. (Dr. Irizarry, Internal Medicine, Mayaguez, PR) (translated from Spanish)

In describing their experiences with Reforma insurance, Puerto Rican physicians cast themselves as patients' protectors against the uncaring capitalism of the island's for-profit medical plans. Dra. Mejía portrayed her experience with delayed payment as problematic because its impact on her personal finances subsequently interfered with her ability to provide medical care through her clinic. Similarly, Dr. Irizarry recounted that Reforma medical plans put his patients in danger by denying them access to expensive medication, which he then had to "deal with." Dra. Torres went even further, overtly denouncing insurance companies as "business-people" who punished her for doing what was best for her patients. Through their descriptions of the role of Reforma insurance companies in contributing to the healthcare crisis, Puerto Rican physicians, and in particular doctors living and working on the island, positioned themselves in heroic opposition to a capitalistic medical market that threatened the health of Puerto Rican patients, integrating an understanding of themselves as noble medical saviors into their professional identities.

At the same time, doctors' frustration with the high-handed methods of Reforma medical plans seemed to stem from the degree to which insurance companies could influence physicians'

authority within the clinic, particularly with the restrictions these entities placed on biomedical practice. In the above excerpts, both Dra. Torres and Dr. Irizarry gave examples that focused on the way that Reforma's for-profit structure inhibited the provision of biomedical treatment. Likewise, Dra. Mejía, who worked as a pediatric rheumatologist in San Juan before moving to Connecticut, recounted an experience where Reforma insurance refused her patient access to an MRI:

> I was taking care of a patient with lupus, and she had severe inflammation in her brain. I needed a repeat MRI of the brain. The insurance wouldn't cover for that. I called up the insurance company and I tried to struggle with them back and forth, and they wouldn't approve for the MRI. I said, this is it. I can't practice like this, it's impossible. Like, *yo no puedo tocar de oído*.[32] I don't know how that expression translates to English, but... there's medicine, you know? There's labs, radiology studies, therapy. So that's why I withdrew, that's why I stopped taking la Reforma.

Dra. Mejía felt that denied claims under the Reforma System prevented her from practicing "medicine," which she defined in accordance with biomedical standards that centered around medical technology: "labs, radiology studies, [and] therapy." When insurance companies within the Reforma System refused to yield to her professional authority by providing her access to the specialized equipment she felt was necessary, Dra. Mejía relinquished formal ties with Reforma entirely. Refusing to contract with Reforma insurance companies was common, especially in private clinics, and will be explored in more detail in Chapter 5. For the purpose of using professional identity to understand how Puerto Rican physicians make sense of the contradictions inherent in the island's healthcare crisis, Dra. Mejia's account illustrates that Puerto Rican doctors' self-concept of heroism in the face of greedy medical plans reflected their understanding of legitimate medical practice and "quality" care. In accordance with a colonial legacy of biomedically-focused professionalization under the early U.S. regime, a commitment

[32] *Yo no puedo tocar de oído*. I can't play it by ear. I can't make it up as I go along.

to healthcare as a human right written into the initial draft of the Puerto Rican constitution, and modern American medical ideals, "quality" care for Puerto Rican physicians included professional autonomy and broad access to biomedical tools. When Puerto Rican doctors said that they were protectors of patients' health, what they meant was that they were protectors of patients' access to biomedicine.

The biomedical heroism and desire for autonomy encapsulated in physicians' professional identity narratives also mirrored the moral economy behind the institutionalization of BioCare in the 1970's[33]. During this period, Puerto Rican doctors moralized their undoing of Puerto Rico's preventative SocialCare healthcare system by defining "quality" medical service in terms of biomedicine and doctors' occupational control. This connection shows a historical through-line with respect to physicians' social values. Furthermore, it highlights how, like their past restructuring of medical institutions, Puerto Rican doctors' contemporary professional identities allow them to make sense of the incongruence between their medical ideals and medical market limitations.

Profits, Power, and The Role of the Government

While Puerto Rican doctors were critical of the business-oriented behavior of private Reforma insurance companies, they also knew that Reforma was "the government insurance plan," and some expressed dissatisfaction with local and federal governments for their perceived role in the healthcare crisis. Just as physicians described Reforma insurance companies as profit-seeking to the detriment of patients' health, doctors on and off the island portrayed the state as contributing to Puerto Rico's medical upheaval through policies that served the monetary

[33] See Chapter 3.

interests of politicians and private businesses. In doing so, physicians reinforced their role as patients' protectors against self-serving capitalistic forces.

Doctors' understanding of government involvement in the island's healthcare crisis correlated with their perception of state responsibility for Puerto Rico's economic situation, which physicians recognized as contributing to the high rates of poverty that made patients reliant on the Reforma System and strained the island's healthcare resources. Physicians that blamed Puerto Rico's economic struggles on colonial federal influence were more likely to recognize the federal government's contributions to the healthcare crisis. This perspective was summarized by Texas-based Dr. Martínez, who asserted: "by the simple fact that you cannot move your own economy, healthcare can't be administered correctly." Dr. Francisco, a pediatric nephrologist in San Juan, tied medical rationing to the federally controlled PROMESA Financial Oversight and Management Board (FOMB), which was enacted after the commonwealth government declared bankruptcy in 2015 and has authority over the island's budget:[34]

> I think that Puerto Rico is a colony. And with that, we bring a limitation in terms of our economic development. And now there is PROMESA. *(sharp, clipped voice imitating PROMESA)* "I can do whatever I want, and you need to do what I tell you, and what Congress tells you. And the important thing is that the Americans you owe get their money." *(imitation stops)* That's the priority. And now, the excuse is that there is no money for anything, not even medication. (translated from Spanish)

Dr. Francisco insinuated that PROMESA, which he characterized as restricting patients' medical access, was made possible by the imperial constraints of the federal government over Puerto Rico's economic sector. Moreover, he implied that PROMESA's negative impact on healthcare stemmed from the law's prioritization of American creditors' profits over Puerto Rican patients' medical needs. Not only did this description of the federal government's role in

[34] For more information on PROMESA, please see Chapter 3.

the healthcare crisis echo doctors' interpretations of Reforma insurance companies as only interested in monetary gain, it also reinforced the centrality of biomedicine to doctors' understanding of "quality" care by specifically mentioning lack of access to medication.

In contrast, doctors that held the commonwealth government responsible for the economic crisis blamed the island's medical situation on local politics, and focused on corruption within the commonwealth government. For example, after describing how Puerto Rico's economic difficulties had started when "local governors put their personal interests ahead of the well-being of Puerto Rican people," San Juan-based surgeon Dr. Pérez explained:

> Here, the problem is that legislators don't do anything because the medical plans that don't pay [doctors] are the same ones that pay for their electoral campaigns. So they don't do anything, because if they do, the next year *(claps)* those medical plans won't help them in their campaign. (translated from Spanish)

Dr. Pérez interpreted both the economic and healthcare crises as stemming from the selfish behavior of local politicians. As such, when he acknowledged that Reforma medical plans were withholding payment from healthcare providers, he connected their actions to a local government more concerned with money and power than with providers' salaries and, by extension, patients' health. Notably, in keeping with state-centric paternalistic medical values encouraged by the early U.S. colonial regime, Puerto Rican physicians never expressed that government provision of healthcare to patients was problematic in and of itself, and few saw Reforma patients as undeserving of government assistance. Physicians' interpretation of government culpability in the healthcare crisis, similar to their assessment of Reforma medical plans, was focused on how profits and power had supplanted investment in patients' health, which they defined in terms of higher provider income and improved biomedical access. In framing the state, be it federal or commonwealth, as callously indifferent to the plight of Puerto

Rican patients, physicians created room for their role as noble protectors of “quality” care in the face of neoliberal influence.

Crisis Realities Lead to Identity Interruptions

Puerto Rican doctors positioned themselves as creative protectors of American-style biomedical access whose difficult experiences working on the island made them superior medical professionals in comparison to their American counterparts. By doing so, they made sense of the contradictions inherent in their colonial healthcare context, including their colonially-influenced idealization of broad access to biomedicine, as well as the professional status, market, and resource limitations accompanying their relationship to U.S. colonialism and U.S. medical hegemony. Despite this carefully crafted self-concept, the critical condition of both healthcare and the economy in Puerto Rico meant that doctors working on the island were sometimes confronted with situations wherein they were unable to fulfill their role as innovative, biomedical patient protectors, or where their stature as medical providers was challenged in ways difficult to integrate into a narrative of high-status biomedicine. Interruptions to doctors' professional identities were most often revealed when discussing two features of the healthcare crisis: personnel shortages and patients' social problems. Through detailing their identity interruptions, doctors revealed an intimate understanding of how Puerto Rico's economic and healthcare crises overlapped, and of the limits of biomedicine for addressing the healthcare needs of the islands' large indigent population. In doing so, physicians inadvertently recognized the efficacy of a sociomedical approach to Puerto Rico's healthcare context.

Personnel Shortages, Status Disruption, and Biomedical Impediments

Physicians' ability to retain congruence between their crisis-laden professional realities and their self-concept as creative biomedical heroes was challenged by a dearth of healthcare

staff in various sectors of Puerto Rico's healthcare system. While lack of administrative personnel challenged doctors' status by forcing them to engage in degrading tasks, the refusal of some island practitioners to accept Reforma insurance, and a burgeoning exodus of doctors to the United States, prevented physicians from effectively protecting patients' biomedical access. Although doctors attempted to align these experiences with their professional identity narratives, the island's inadequate healthcare workforce created circumstances that constituted identity interruptions.

One of the foremost differences physicians identified when comparing medical practice in Puerto Rico to medicine in the United States was the commonwealth's shortage of administrative personnel. For some doctors, the extra responsibilities assigned to them in the wake of bureaucratic scarcity were perceived as an affront to their professional status. Dra. Silva, a surgeon working in Florida, described feeling burdened by the lack of administrative help on the island:

> In Puerto Rico, I had a patient in intensive trauma that spent two months intubated in the hospital. Getting access to those services was so difficult! Here in Florida, I call the social worker and they move the Earth to get me what I need. I order something, and I have faith it will be done. In Puerto Rico, you had to do the work of everyone. It was stressful. I like to operate. I don't want to be a secretary, or a nurse, or a social worker. That work should be done by other people. (translated from Spanish)

Dra. Silva explained that in the United States, she was able to work within the status-appropriate confines of surgery, focusing on operating rather than non-surgical tasks. However, the lack of administrative personnel in Puerto Rico forced her to perform labor that better equipped facilities in the United States delegate to extra-medical workers. The roles that she described having to take on (secretary, nurse, and social worker) are all of a lower status than her traditional posting of physician, illustrating that Puerto Rico's healthcare crisis obligated doctors to perform tasks that endangered their occupational rank within the context of American medical

hegemony; as Dr. Silva pointed out, while medical professionals in the United States are able to concentrate on high-status biomedical labor, Puerto Rican doctors on the island often find themselves doing the menial work of "other people." Insufficient administrative staff in Puerto Rico compelled physicians to perform lower-status duties that impeded their professional lives from aligning with their professional identities as biomedically-focused medical providers.

The shortage of administrative workers in Puerto Rico also meant that rather than secretaries or billing departments confronting Reforma insurance providers, it was often physicians themselves who were tasked with battling medical plans for payment and coverage. One physician insisted, "I call the insurance. I do the paperwork. I sign the paperwork. I send the fax," echoing Dr. Silva's narrative of identity interruption by adding that the entire process made him feel more like a secretary than a physician. While many doctors framed their personal appeals to Reforma as a heroic strategy for ensuring patients' access to care, they were often unable to quell the contradiction between their administrative responsibilities and their professional identities as medical providers:

> The Reforma medical plans are the enemy, because all they care about is profit. I fight them on a daily basis. I call them all the time, I write appeals [for medication]. I mean, I'm the one that really knows my patients, I'm the one that looks them in the face. I'm the doctor. But I end up staying in the office, late, doing the work of a secretary. (Dr. Davila, Immunologist, Mayaguez, PR) (translated from Spanish)

In this excerpt, Dr. Davila framed paperwork and phone calls on behalf of his patients as part of a noble battle against insurance profiteering, and asserted his status as biomedical expert by comparing his doctoral knowledge to the ignorance of uninformed Reforma agents. At the same time, he expressed frustration that his creative pursuit of biomedical access for his patients placed him in a position where he was forced to compromise his professional identity by performing secretarial work. Despite Dr. Davila's efforts to integrate extra-medical labor into his

professional identity narrative, menial tasks necessitated by administrative shortages and the Reforma System threatened his self-concept.

Because Reforma insurance companies were so difficult to work with, and because doctors were often unable to delegate confrontations with medical plans to administrative personnel, physicians reported that many doctors in Puerto Rico deliberately stopped accepting the government insurance. This contributed to the second personnel shortage on the island: a shortage of accessible physicians, particularly specialists. Dr. Maldonado, an oncologist living in Ponce, Puerto Rico, spoke candidly about how dropped Reforma insurance presented a challenge to his work:

> Lots of physicians stop taking Reforma because the plans are not paying them, or are paying them late. I had a patient with prostate cancer who was in treatment with a urologist. Suddenly, without warning, he stopped taking Reforma. And then, while you wait for an appointment at Centro Medico, it's 4 months, 5 months, 6 months. And the Reforma patient with prostate cancer is left the entire time without treatment. It's frustrating, but what can you do?

Like most physicians who talked about Puerto Rican specialists not accepting Reforma patients, Dr. Maldonado asserted that this decision was motivated by personal finances, contradicting the narrative that Puerto Rican doctors selflessly work to protect patients from profit-motivated insurance companies. Dr. Maldonado managed this identity threat by reiterating that doctors were simply responding to the corrupt behavior of for-profit Reforma entities. At the same time, his role as a biomedical hero was interrupted when his low-income Reforma patients were unable to access specialized providers. While Dr. Maldonado focused his discussion of this phenomenon on physicians' refusal of Reforma contracts, his story also inadvertently revealed that poverty is a fundamental barrier to accessing biomedicine in Puerto Rico. Relatedly, Dr. Maldonado's account touched on how personnel shortages on the island are felt more keenly by patients' whose financial circumstances leave them dependent on Reforma coverage. One

physician explicitly connected the rejection of Reforma insurance with medical inequity, briefly explaining, “When private hospitals notice that Reforma cards pay less, they stop taking them. And that’s discrimination against the type of patient that has public insurance.” Through their commentary on the connection between patients’ economic circumstances and their access to specialists, Puerto Rican doctors recognized the contribution of sociomedical circumstances to the island’s healthcare difficulties.

Although physicians’ refusal to accept Reforma insurance was a contributing factor to the island’s shortage of accessible specialists, doctors reported that migration to the United States presented a much larger problem, and affected not only Reforma patients but privately insured Puerto Ricans as well:

> Right now, one of the biggest problems is that a large number of specialists have left. In Puerto Rico, we never had a huge number of specialists, so that really limits access for anyone looking to make an appointment. When you have a specialty with only 20 physicians and one leaves? That’s five percent of that specialty. And when your patients need to see a specialist, well what can you do? Lament and cry, because imagine… (Dra. Llanos, Neonatal Pediatrician, Manatí, PR) (translated from Spanish)

Dra. Llanos explained that the exodus of specialists was especially problematic because Puerto Rico already housed a limited number of specialized physicians, compounding the impact of migration on patients’ ability to access specialized care. Furthermore, she echoed Dr. Maldonado’s feelings of helplessness concerning how to proceed when patients needed to see specialized doctors and were unable to find appointments. Drs. Maldonado and Llanos illustrate how the movement of medical professionals to the mainland exacerbated the contradictions between doctors' modernist medical ideals and Puerto Rico’s limited medical market, and how when doctors were unable to interpret their experiences through their heroic biomedical identity narratives, they experienced painful identity disruptions.

Doctors relayed that many of the Puerto Rican providers settling in the United States were young physicians who had initially moved to the mainland for specialized medical training. Dr. Delgado, a Texas-based neurologist who had initially completed a fellowship in the U.S. but had moved between the island and mainland on several occasions, presented his perspective on this trend:

> It's a common thing to come here to the United States, train and then go back to Puerto Rico. Since we are U.S. citizens, we have that ability, and that was part of the culture. So you do your residency [in Puerto Rico]... medical school there is amazing, but it's limited the number of people that they can train. And the different sub-specialties are good, but there may be some that are better in the United States, or that Puerto Rico doesn't have. So, you will come to the United States to train and then return to Puerto Rico to practice. But what happened is that while doing that, people were offered better positions [on the mainland].

Many physicians acknowledged the regularity with which Puerto Rican doctors left the island for specialized training. Dr. Delgado suggested that this practice was so integral to the medical system in Puerto Rico that it was part of the culture of medical education on the island, citing that despite the exceptional medical training offered in the commonwealth, physicians were driven to leave by educational opportunities in the United States. However, the regularity with which young doctors were staying in the United States was a newer phenomenon. Dr. Delgado's observation that doctors discovered better medical posts while studying on the mainland was echoed by mainland and island-based physicians alike, who implied that the defining elements of the healthcare crisis, including low salaries, Reforma debacles, lack of administrative support, and a shortage of medical resources, pushed young doctors to stay in the United States. As will be explored in more detail in Chapter 5, doctors on and off the island interpreted the movement of physicians to the United States as born not from a desire for profit, but rather as an involuntary response to an untenable situation perpetrated by Reforma insurance companies and the state. While this understanding of relocation succeeded in shifting blame for

specialist shortages away from providers' themselves, protecting Puerto Rican doctors' narrative of selfless service, physicians were unable to integrate the obstacles migration created to patients' biomedical access with their self-concept as biomedical heroes. Dr. Herrera, a surgeon working at a university hospital in San Juan, explained:

> I have spent almost 20 years trying to educate residents, hoping that they will stay. And there was a time when many of them did stay, or left and came back. But today, most of them will leave. One [of my residents] was accepted to a robotic surgery program in the United States. Six months later, he called me and said he wasn't coming back. They were offering him 400,000 dollars a year, a partnership by Year 3, a retirement plan with the hospital, access to the latest equipment and treatments. He won't have to deal with insurance, because they have an administrative team. We can't compete. There's only a few of us old geezers left in the hospital's surgery department. If we leave, who will help the patients here in Puerto Rico? (translated from Spanish)

While many doctors recognized the immediate obstacles to biomedical access generated by physicians' exodus to the mainland, Dr. Herrera recognized his inability to retain young medical talent as also detrimental to the future health of Puerto Rican patients. Despite indicating that staying on the island in and of itself constituted a contribution to patients' well-being, implying that he was able to "help" patients simply by working in the hospital's surgery department, Dr. Herrera expressed that the crisis-motivated migration of developing doctors challenged his ability to protect patients' health by training the island's next generation of medical stewards. Like other physicians grappling with identity interruptions around personnel shortages, Dr. Herrera was unable to successfully mend the rift between his professional identity as a patient protector and his professional reality of healthcare hardship.

Social Problems, Biomedical Boundaries, and Identity Breaks

Although physicians admitted that their class and profession protected them from the worst of Puerto Rico's economic crisis, they drew explicit connections between the islands' healthcare and economic problems, reporting that an increasing number of indigent and isolated

patients complicated healthcare encounters. Doctors steadfastly distinguished between “social” problems outside of their purview and “medical” problems in line with their professional role as biomedical heroes. However, they also assigned responsibility for solving the economic crisis and its accompanying social problems to the broader Puerto Rican community, which they overtly considered themselves a part of. Despite physicians’ efforts to separate the civil from the clinical, sociomedical overlap resulted in restricted access to biomedical care, challenging doctors' identity narratives.

Dr. Flores, an emergency room physician working in San Juan, described the shifting population of patients at his hospital:

> I have observed a surge in social work consults. People who have no family structure, no family backup, or they live in dire situations. People will come in and then they're left here, and they have nowhere to go.

Dr. Flores’s account demonstrates that doctors in Puerto Rico experienced the island’s economic problems through their patients, and suggests that as a result of the economic crisis, physicians often encountered individuals whose greatest needs were social rather than pathological. Similarly, oncologist Dr. Maldonado noted that as young people of all occupational backgrounds left the island for educational and career opportunities in the United States, elderly family members with complicated medical issues were left behind “with no support system, no one to check on them at home, and no one to do their grocery shopping.”

Not only did doctors recognize their patients’ non-clinical problems, they also made explicit connections between patients social circumstances and healthcare needs. For example, cardiologist Dra. Ramírez recounted an experience with a Reforma recipient:

> There is a man who is paraplegic. He’s on an oxygen tank, and he eats through an IV. Medically, I can’t do anything for him. I got him into a treatment center, but what he needs is more help, someone to take care of him. And the family is supposed to do it, but

> since they don't have money, they're not going to do it. And that's why he has become so sick. It's so sad. If you saw the photos, you would cry. (translated from Spanish)

In this excerpt, Dra. Ramírez explicitly articulated a sociomedical problem, explaining that the disadvantaged financial circumstances of her patient and his family contributed to the worsening of his medical condition. At the same time, she constructed a boundary between her patient's social vulnerability and his medical requirements. Dra. Ramírez indicated that a need for physical care, and an inability to access physical care as a result of lack of capital, was not a medical issue and therefore outside of her vocational responsibility. On the one hand, Dra. Ramírez's story highlights that Puerto Rican physicians were painfully aware of the interconnected nature of the economic and healthcare crises on the island, as she described her patient's lack of economic resources as a contributing factor in his deteriorating condition. On the other, Dra. Ramírez's insinuation that the care-work her patient required was not a medical obligation reflects her dedication to a narrowly biomedical definition of doctors' work.

While Dra. Ramírez expressed that her inability to help her paraplegic patient through biomedical means was emotionally distressing, her professional identity as a biomedical provider was protected by the boundary she drew between her patient's social and clinical needs. Although she lamented her patient's worsening health, she retained her professional self-concept by explaining that she had fulfilled her biomedical duty; "medically, [she couldn't] do anything for him." At the same time, Dra. Ramirez's experience illustrates how Puerto Rican physicians' encounters with impoverished patients, whose medical conditions called for non-medical solutions, clashed with the American medical standards and biomedical focus under which doctors were educated and expected to perform. Moreover, later in the interview, Dra. Ramírez admitted that restricted access to biomedicine related to indigent patients' reliance on Reforma insurance did constitute a break in her professional identity narrative:

> You say, "You need to use these medications." [The patient says], "Oh, but Doctora, I don't have money for that, and I have Reforma, my medical plan won't buy it." "OK, well you need to ask for this." "Well Doctora, I asked for it but they wouldn't give it to me." Well, what can I do? You feel like… why am I doing this? I feel useless. You feel like you are returning to medicine from the 1900's, because it used to be like this! The technology of today didn't exist. (translated from Spanish)

In accordance with Puerto Rican doctors' biomedically-focused professional identities, Dra. Ramírez defined her preferred treatments as centered around modern medical technology, and insinuated that to approach medicine from a non-biomedical standpoint was outdated. At the same time, she understood that her patients' vulnerable financial situations impacted their ability to access biomedical care; when her patients were poor, they relied on the Reforma insurance system. Then, when profit-seeking Reforma entities inevitably denied their medical claims, indigent patients were unable to afford the medications and technological solutions that she recommended. When poor patients lacked access to the medications she suggested, Dra. Ramírez's role as a physician, which was dependent on helping patients through biomedical expertise, was rendered demoralizingly ineffective. Despite doctors' efforts to separate the social from the medical and shape their identities in ways that alleviated tension between modernist medical values and the island's limited healthcare resources, their professional identity narratives were interrupted when the reality of a poverty-stricken populace and strained medical market prohibited them from dispensing biomedical care.

In La'Tonya Trotter's (2020) study of nurse practitioners, she observes that because of institutional and state disinvestment in social work, U.S. nurses seek to manage patients' social problems in the clinic, medicalizing and de-contextualizing lack of social and financial support rather than recognizing social and medical overlap. Puerto Rican physicians resisted this temptation, acknowledging how the social played into the medical but defining social problems as meriting an out-of-clinic response. While in some cases their stringent separation of the social

and medical served to protect their professional identities, as was the case for Dra. Ramirez's recollection of her paraplegic patient, in others, as in her example of Reforma insurance claim denials, it exacerbated identity breaks, reminding doctors of the futile impracticality of biomedical solutions in the face of non-medical issues. However, Puerto Rican doctors did see a place for themselves in resolving the islands' economic crisis and its ensuing social problems: a community-based response to Puerto Rico's economic difficulties. This cooperative perspective was exemplified by Dr. Maldonado, a Ponce–based oncologist, who blamed the economic situation on reckless spending by the commonwealth government, but described this trend as enabled by the broader Puerto Rican electorate:

> We ourselves have permitted that these same politicians continue being elected, continue mismanaging money, continue playing around. We are not capable of making important decisions to help ourselves. So unfortunately, when it comes to the government… *el pueblo tiene la culpa.*[35] (Dr. Maldonado, oncologist, Ponce, PR) (translated from Spanish)

As seen in this excerpt, Dr. Maldonado blamed the island's economic woes on the commonwealth government. However, he also presented Puerto Rico's difficulties as a community problem for which he, as part of the *pueblo*, shared personal culpability, implying that it was up to the Puerto Rican people to solve the problem they had created by choosing better politicians. Physicians who focused instead on Puerto Rico's colonial ties to the mainland also insinuated that the Puerto Rican community represented the best option for strengthening the island's economy:

> My way of seeing things has a lot to do with the political structure that exists between colony and empire. That affects the situation a lot in terms of you being able to maintain your economic situation and administrate your economy when you're not fully in charge. *Estamos con las manos amarradas*.[36] The reality is that we are not part of the United

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[35] *El pueblo tiene la culpa*. The people (with people being used in a similar way that "We, the people" is used in the Declaration of Independence) are to blame.
[36] *Estamos con las manos amarradas*. Our hands are tied.

States. And in terms of identity, I see us as entirely apart. I consider myself Puerto Rican (Dr. Campillo, Emergency Physician, Carolina, PR) (translated from Spanish)

Unlike Dr. Maldonado, Dr. Campillo saw the island's economic situation as connected to Puerto Rico's dependent relationship with the United States. At the same time, his insinuation that greater local control over Puerto Rico's economy was the best path forward, and his emphasis on his own Puerto Rican identity, reflected a similar commitment to participating in a community-focused response to the economic crisis. While doctors did not experience a professional responsibility for resolving Puerto Rico's social problems, they did see themselves as part of a potential community solution.

For all of their efforts to separate the social from the clinical, the identity interruptions and healthcare complications that Puerto Rican physicians described around both patients' social vulnerability and the dearth of available of specialized medical professionals on the island, especially for impoverished patients, lend credence to the idea that physicians' focus on expensive, specialized, biomedical care is ill-suited to addressing the healthcare needs of Puerto Rico's large indigent population. This is not to diminish doctors' emotional turmoil around the healthcare crisis, or reduce the authenticity of their efforts to protect patients' health; as will be explored in Chapter 5, doctors' on and off the island were genuinely committed to promoting the well-being of their patients and Puerto Rico through innovative biomedical means. However, physician's idealization of broadly accessible biomedicine is incompatible with Puerto Rico's present-day healthcare and economic realities. In fact, in recognizing the connection between patients' medical problems and social circumstances, Puerto Rican doctors themselves inadvertently admitted that what Puerto Rico's healthcare context requires is an approach to care that addresses patients' sociomedical needs.

It is worth noting that both the medical values and healthcare circumstances in this equation are intrinsically connected to Puerto Rico's long-standing colonial context. Spanish and early U.S. medical colonialism and professionalization under U.S. imperialism encouraged Puerto Rican physicians to develop contradictory ideals that focused on biomedical superiority and healthcare as a right, present day American medical hegemony continues to promote adherence to expensive biomedical techniques, and centuries of subjugation under Spanish and especially U.S. economic and healthcare policies have all contributed to the unsuitability of modernist medicine on the island. But as always, colonialism is mutually constitutive (Go, 2016). Puerto Rican doctors, within a context of American colonialism, contributed to the collapse of the sociomedical SocialCare medical system of the 1950's that ultimately led to the institutionalization of Reforma. Today, despite recognizing the intrinsic connection between their patients' social and medical needs, Puerto Rican physicians continue to resist an overtly sociomedical approach to care, and their focus on biomedicine remains ill-suited to addressing their patients' medical circumstances.

Conclusion

Puerto Rican physicians exist at the intersection of Puerto Rico's marginalized and impoverished healthcare field and U.S. medical abundance, and their ties to these overlapping medical contexts are accompanied by contradictions related to doctors' professional legitimacy and status, biomedical ideals, and access to medical resources. Through accounts of how Puerto Rico's interconnected economic and healthcare crises, characterized by low salaries, resource and personnel shortages, and poor patients dependent on capitalistic Reforma insurance, complicate their medical work, Puerto Rican physicians on and off the island revealed a professional identity narrative that functions to make sense of the tensions inherent in their

professional lives. While doctors drew from their American medical credentials and commitment to American medical standards when defending their professional status and legitimacy, they also conceptualized their connection to Puerto Rico's resource-poor medical sphere as imbuing them with biomedical ingenuity superior to their U.S. counterparts. In doing so, doctors reinforced U.S. medical hegemony, but simultaneously re-contextualized their ties to the island as professionally advantageous. Physicians reconciled their stigmatized position within the United States' medical umbrella and promoted a professional identity that cast Puerto Rican physicians as high-caliber, innovative arbiters of patients' biomedical access. Furthermore, doctors on the island expanded this identity narrative, resolving the tension between a limited and professionally-restrictive healthcare market, a colonial legacy of biomedical idealization, healthcare as a right, and US. medical domination by presenting themselves as biomedical heroes fighting for their patients' health against a profit-oriented Reforma System and self-interested federal and commonwealth states.

Although physicians' professional identities were well-positioned to ameliorate the contradictions inherent in their professional lives, Puerto Rican doctors' identity narratives were interrupted when the social impacts of Puerto Rico's economic crisis and the island's shortage of healthcare personnel forced providers to perform low-status tasks and prohibited them from successfully connecting their patients with biomedical care. Doctors attempted to circumvent identity breaks by separating social problems, for which they were not professionally responsible, from medical problems, which merited clinical interventions. In fact, in confronting the economic crisis, doctors advocated for participating in a civilian community solution disconnected from the medical sphere. Despite these efforts at identity management, doctors expressed emotional unrest at their inability to fulfill their professional role in the face of their

patients' financial vulnerability. In describing their identity interruptions and noting the connections between patients' social and medical needs, Puerto Rican physicians inadvertently illustrated that their colonially-influenced preoccupation with American-style medical modernism is incompatible with the island's economic and healthcare reality.

Puerto Rican physicians' professional identities as superior, heroic, biomedical innovators revealed the underlying understandings through which doctors on and off the island make sense of and approach their professional work. The following chapter explores how physicians deploy their identities to construct and moralize their responses to the healthcare crisis, and shows that doctors' "relational packages" are predictably focused on innovative strategies for improving biomedical access. However, analysis of doctors' actions also reveals that Puerto Rican physicians participate in socially-embedded, redistributive, community solutions aimed at alleviating Puerto Rico's medical problems that mirror their conceptualizations of how best to resolve the island's economic woes.

Chapter 5: Responding to the Healthcare Crisis

The Reforma System, and Puerto Rico's ensuing healthcare crisis, have complicated the ability of Puerto Rican doctors to match their professional ideal of broadly accessible biomedical care with their professional reality of low pay, indigent patients, for-profit insurance, and decreased access to specialized healthcare resources. In order to make sense of the contradictions inherent in their connection to Puerto Rico's resource-poor medical context and their subsummation to American medical hegemony, Puerto Rican doctors on the island and mainland conceptualize themselves as innovative biomedical providers made superior to their U.S. counterparts through their ability to "do more with less," and physicians based in Puerto Rico define themselves as noble protectors of patients' health against a profit-oriented insurance landscape. This chapter investigates how Puerto Rican physicians on and off the island put these professional identities into practice, exploring the "relational packages," (constructed of social ties, economic transactions, media such as time/ money, and sense-making schema)[37] through which doctors respond to, and moralize their responses to, the island's medical situation.

Lo's (2005) observes that doctors' professional lives are a mutually constitutive combination of their connection to professional and extra-professional social categories. Similarly, Zelizer (2012) emphasizes that the identities of transactors contribute to their "relational packages." In line with these findings, analysis of Puerto Rican doctors' reactions to the healthcare crisis reveals that island and mainland-based physicians draw upon contradictory, colonially-constructed professional identities to participate in socially-embedded, redistributive, community solutions to Puerto Rico's medical problems. Through their responses to the crisis,

[37] For a more comprehensive discussion of "relational packages," conceptualized by Zelizer (2012), see Chapter 1.

physicians seek to balance the colonially-influenced ideals of biomedical superiority and a patriotic responsibility to "heal" the island with the limits of their respective medical markets and social contexts. However, despite the unique, context-specific attributes of their actions, Puerto Rican physicians ultimately reveal a cross-Caribbean understanding of their geographically-divergent community solutions, and of the Puerto Rican medical community. To this end, the efforts of Puerto Rican physicians in the United States consciously build upon the work of doctors on the island.

Doctors working on the island are actively embedded in Puerto Rico's medical field and island community, and spend their days aiding other Puerto Rican community members. Consequently, Puerto Rico-based doctors framed their professional presence in the commonwealth as a duty not only to their individual patients but to the island as a whole. This understanding echoed both their heroic professional self-concept and the nationalistic conceptualization of medical work encouraged under Spanish and early U.S. colonial rule[38]. At the same time, island doctors operated within a healthcare arena that was historically constructed as medically inferior to the United States[39] and was currently experiencing economic and Reforma-related limitations on practicing American-style care, factors which constituted threats to physicians' professional status under American medical hegemony. As such, despite presenting their professional lives on the island through a narrative of patriotic community service, doctors living in Puerto Rico protected their claim to American-style doctoral prestige by drawing explicit boundaries separating their Puerto Rican-ness from their everyday clinical practice.

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[38] See Chapter 2.
[39] See Chapters 2 and 3.

In order to balance their professional and patriotic duty to provide "quality" care with Puerto Rico's economic, resource, and Reforma barriers, physicians on the island engaged in three community-centric patterns of response, reallocating resources so as to improve Puerto Rican patients' biomedical access: boundary-crossing within the healthcare system (working between system arenas, including private, public, and departmental borders), compensating and improvising (creatively utilizing medical supplies beyond their traditional purpose), and subsidizing the Reforma System with their own labor and money. Puerto Rico-based doctors moralized the use of what they recognized as dated medical techniques and delayed medical procedures by leaning on their innovative professional identities, emphasizing the creativity they employed in administering medical services to the island within an atmosphere of medical scarcity. Furthermore, they expressed confidence in the efficacy of their community solutions to the healthcare crisis on the basis of Puerto Rican providers' ability to work together to "do more with less," especially in comparison with the individualistic medical approach practiced in the United States. However, doctors on the island struggled to articulate the limits of their efforts, as admitting they were unable to successfully implement American medical standards to help patients threatened their already-tenuous claim to professional legitimacy.

Puerto Rican physicians who move away from the commonwealth for professional opportunities on the U.S. mainland arrive in a medical arena plush with prestige, biomedical resources, and elevated income. However, they leave behind an island community wrestling with economic and healthcare crises, relinquish their proximity to family and friends, and find themselves treating U.S. patients rather than the Puerto Rican community. Mainland-based doctors cited a higher quality of life, and in particular a more stable financial position for themselves and their children, as drawing them to the United States. At the same time, many

moralized their departure from the struggling island by framing their presence in the U.S. as the result of an involuntary, forced exodus.

Puerto Rican doctors in the United States responded to the healthcare crisis through two redistributive community strategies that endeavored to fulfill their idealization of biomedical superiority and their commitment to "healing" Puerto Rico while grappling with the limitations inherent in their geographic distance from the island. First, U.S.-based physicians pursued professional opportunities that reapportioned biomedical techniques, technology, and research from the United States mainland to the island. While they downplayed a patriotic narrative of medical service as realization of their biomedical ideals became more dominant within the United States' atmosphere of medical abundance, physicians on the mainland still framed these medical exports as a way to support the broader Puerto Rican community from afar. Secondly, doctors in the United States described serving U.S. patients through Puerto Rico's community culture. Physicians asserted that the distinct attributes of Puerto Rican physicians, including medical innovation and an affectionate approach to care, were a scarce resource in the United States that, when redistributed from the island to the mainland, bolstered the well-being of mainland patients. U.S.-based physicians remained invested in their superior, innovative professional identities and a doctrine of Puerto Rican-style medical practice that promised the efficacy of a community approach to "doing more with less." While the professional legitimacy and status gained by moving to the United States allowed mainland doctors to more openly incorporate their stigmatized Puerto Rican identities into their clinical practice, it also encouraged doctors to more openly acknowledge the limitations of the community solution with respect to overcoming the impact of the healthcare crisis on Puerto Rican patients' health.

Doctors’ accounts reveal that the neoliberal Reforma System, initially touted as a more efficient approach to healthcare provision, is tenuously held together by the combined efforts of the broader Puerto Rican community, and that Puerto Rican physicians’ actions in response to the healthcare crisis constitute an important part of this ecosystem. Doctors on the island alleviate issues with healthcare accessibility, medical resources, and financial insolvency directly, creatively reallocating healthcare and financial assets from across public, private, and personal sources to help Puerto Rican patients. While they retain access to familial social networks and patriotic pride in their professional exploits, they do so at the expense of financial and professional opportunities available in the United States. Similarly, doctors on the mainland assuage Reforma’s impact on medical training and healthcare access by bringing biomedical techniques to the island. Although this allows them to pursue lucrative and prestigious professional positions, mainland-based physicians are deprived of immediate access to familial and community support, and lose a sense of patriotic purpose in their professional lives. Through this series of sacrifices, Puerto Rican doctors subsidize Reforma’s failing for-profit medical market. Furthermore, physicians illustrate that their insistence on a biomedical, rather than sociomedical, approach to medicine is not merely a façade for elevating their professional status, but rather a genuine foundation for implementing their vision of “healing” of the island.

Island-Based Responses

Staying in Puerto Rico meant that physicians apportioned direct medical assistance to Puerto Rican community members while actively confronting their marginalized position within the United States medical system and the effects of the island’s healthcare crisis. Island-based providers drew from their heroic professional identities and a colonial history of medical nationalism to present their professional lives as a duty to the island and its people. However,

they also protected their professional legitimacy within the American medical ecosystem by disconnecting being Puerto Rican from their medical practice.

Doctors in Puerto Rico responded to the healthcare crisis by attempting to balance their colonially-influenced ideals of healing the island and biomedical superiority with the resource and economic limitations accompanying Puerto Rico's medical context. More specifically, physicians on the island implemented community strategies that worked to reallocate supplies, funds, and labor towards improving patients' biomedical access. Doctors engaged in patterns that included boundary-crossing between healthcare system arenas, compensating for resource shortages and creatively employing medical supplies, and utilizing their own monetary reserves, time, and professional skills to subsidize deficiencies within the Reforma System. Physicians in Puerto Rico made sense of their responses to the crisis by leaning into a Puerto Rican medical identity centered around "doing more with less" and increasing the accessibility of biomedical care on the island, moralizing the community solution by emphasizing how they collectively and creatively facilitated the fulfillment of their professional obligation to their patients and their patriotic duty to the island. However, their direct embeddedness within Puerto Rico's stigmatized healthcare context, which necessitated a degree of status-protection against the hegemonic influence of resource-heavy U.S. medical expectations, meant that they struggled to recognize the practical limits of making use of outdated medical techniques and delayed medical procedures with regards to patient's healthcare outcomes.

Why do they stay?

Professional and Patriotic Duty

The most common reason physicians gave for staying in Puerto Rico through the healthcare crisis was a sense of duty, both to their patients and to the island. When asked if she had ever considered leaving Puerto Rico, Manatí-based Dra. Llanos responded:

> I have never considered leaving, because of the people that I help here. If all the physicians leave because we are frustrated, there will be no one to help the *pueblo* to rise up. I am going to help the island so that everything will improve little by little. And as a physician, I feel a responsibility not to abandon my patients. (Dra. Llanos, Neonatal Physician, Manatí, PR) (translated from Spanish)

While Dra. Llanos described feeling a responsibility to stay in Puerto Rico for her patients, she also saw her work as a physician as impacting the success of the entire island. Her narrative, which connected the individual patients she helped with the broader *pueblo*, or people, of Puerto Rico, illustrates that Dra. Llanos understood her professional contributions as impacting the well-being of the entire Puerto Rican community. Furthermore, it parallels the nationalistic conceptualization of medical work encouraged under early U.S. colonial rule, when Puerto Rican physicians were urged to join the American colonial regime in "healing the nation" through hookworm eradication[40]. In fact, physicians working in Puerto Rico regularly used overtly nationalistic language when discussing their presence on the island, as exemplified by Arecibo-based Dr. Santos:

> Being Puerto Rican is a joy. *Es mi patría. Es mi país*.[41] It's where I was born. It's where I am working, despite not being able to make a living that will give me the life of a physicians that many people have, with a fancy car, drinking wine, living the life. I could have that life in the United States. But I have decided to stay here *por amor a la patría*[42]. (Dr. Santos, Family Medicine, Arecibo, PR) (translated from Spanish)

[40] See Chapter 2.
[41] *Es mi patría. Es mi país*. It is my homeland. It is my country. *Patría* refers more to an emotional or patriotic connection, while *país* refers more to a state, or physical territory.
[42] *Por amor a la patría*. For love of my homeland.

Dr. Santos presented Puerto Rico not only as his current residence, but as his homeland, infusing nationalistic affection into his relationship with the island. Furthermore, he understood his decision to stay in Puerto Rico as a sacrifice. Although he said he could easily be living a more affluent lifestyle in the United States, he expressed that he chose to remain in Puerto Rico out of love for his homeland. Like Dr. Santos, many physicians conceptualized their presence in Puerto Rico as a sort of patriotic offering, and the ability of doctors to move to the United States and immediately receive a boost in status and finances loomed over their discussions of staying on the island. Dr. Maldonado explained that although he knew that more lucrative positions existed in the United States, he was thankful to the island for giving him the opportunity to become a physician:

> You do think about the possibility of leaving, going to the United States where it is a little bit easier, where you could make more money. But honestly, I don't see myself leaving here. I owe a lot to Puerto Rico, and I see [working here] as part of my obligation. Medical school here is cheap. I don't come from a lot of money, and Puerto Rico allowed me to go to medical school and become what I am. I'm very grateful. By staying here, I can give back to the country. (Dr. Maldonado, Hematological Oncologist, Ponce, PR) (translated from Spanish)

Medical school in Puerto Rico is significantly less expensive than in the United States; during the 2021-2022 year, tuition for Puerto Rico residents at UPR Medical School was only $17,500, compared with the U.S. public medical school in-state tuition average of $33,489 during the same period (AAMC, 2021). Dr. Maldonado understood this affordability as having enabled him to become a physician despite his humble origins. Consequently, he felt that it was his duty to use the doctoral skills he gained over the course of his education to give back to the island, even if it meant foregoing an "easier" life in the United States.

It's hard to over-state the passion with which island-based doctors described their dedication to Puerto Rico. One doctor told me that during his fellowship in New York he "didn't

even buy a bed," opting to sleep on a floor-bound mattress for two years as a symbol of his commitment to returning to the island. However, physicians differentiated between a nationalistic motivation for their work, which they connected to their Puerto Rican identity and helping the broader Puerto Rican community, and a rational approach to medical practice. Dr. Campillo, an emergency physician in Carolina, explained this dichotomy:

> I don't see being Puerto Rican as affecting my practice in terms of treating my patients. I've completed my Steps, I have my qualifications, I could leave tomorrow and get a medical license in whatever U.S. state. But I do feel a duty to be a physician in Puerto Rico, because I was born here and I studied medicine here. It's not that I owe my country my profession. But I feel grateful for the opportunity that was given to me. (Dr. Campillo, Emergency Physician, Carolina, PR) (translated from Spanish)

Like Dr. Maldonado, Dr. Campillo saw his medical work in Puerto Rico as a patriotic expression of appreciation for the opportunity to become a doctor. At the same time, he maintained that being Puerto Rican did not affect his medical practice, and emphasized that his medical work and credentials were no different from any physician in the United States, so much so that he could easily transfer his skills to the mainland. His wording also seemed to suggest that to bring being Puerto Rican into his medical work would be problematic; he didn't see being Puerto Rican as "affecting [his practice]," and presented his ethnic identity in opposition to his medically advantageous American credentials. Dr. Gonzalez conveyed similar sentiments:

> We have the same parameters as medical schools in the United States. Our residency programs are accredited by the same standards as residencies in the United States. In training, we are at the same level, and anyone who graduates from here can get on a plane and work in the United States. Being Puerto Rican has helped me understand the particular problems in the Puerto Rican population, just like someone from El Paso could understand Mexican culture. But it's not related to my medical practice. (Dr. Gonzalez, Emergency Medicine, San Juan, PR) (translated from Spanish)

Earlier in the interview, Dr. Gonzalez described practicing medicine in San Juan as "fulfilling [his] duty to serve Puerto Rico." However, he also stressed that being Puerto Rican had no bearing on his professional work, and supported his claim by invoking the U.S.-approved

medical training required of Puerto Rican doctors. Furthermore, while he conceded that familiarity with Puerto Rican culture enabled him to better understand the needs of the Puerto Rican community, he conscientiously equated this skill with the expertise of physicians on the mainland.

Doctors' patriotic description of their professional lives contradicted their insistence on separating their medical practice from their ethnicities. This phenomenon reflects both the conflicting colonial foundations upon which medicine in Puerto Rico was founded and the specific characteristics accompanying Puerto Rico-based physicians' direct social embeddedness on the island. Spanish and early U.S. colonial regimes instilled Puerto Rican doctors with a nationalistic perspective on medical service and a medical modernist understanding that medical work contributes to the entire island's progress. Today, physicians working in Puerto Rico are active members, personally and professionally, of the island's community. They are emotionally and physically invested in the idea of being part of a Puerto Rican people; not only do they passionately identify as Puerto Rican, they also live and work on the island, and express a heartfelt stake in helping the *pueblo* despite possessing an intimate understanding of the economic and professional opportunities they forego in the process. Island-based physicians practice medicine under the auspices of American biomedical standards, in a place constructed as medically inferior through imperialistically-managed U.S. professionalization, while working within the confines of extensive biomedical scarcity. In describing their presence on the island, doctors attempted to balance their belief in American-style biomedical superiority and their patriotic commitment to their island community with the threat that their participation in Puerto Rico's medical sphere posed to their professional legitimacy.

When making sense of their professional existence on the island, physicians drew from professional identities that located professional legitimacy within ties to American medicine, leaning on American medical credentials and the lingering possibility of easily accessible prestige in the United States. However, they framed their presence in Puerto Rico as a patriotic duty to thrust the island and their fellow Puerto Rican inhabitants forward through medical practice, reflecting their self-concept as heroic medical arbiters and openly drawing from a colonially-influenced, medical modernist, patriotic understanding of their medical work. Although Puerto Rican doctors on the island conceptualize their professional lives as a national, community-oriented service motivated by an impassioned bond to Puerto Rico and its people, they uphold the implicit boundaries and "exclusionary mechanisms" (Lo, 2005, p. 395) of American medical culture in order to protect their professional legitimacy from their stigmatized position as active island physicians.

Family Duty

Family, and specifically familial obligation, was the second most commonly mentioned reason island-based physicians gave for their continued presence in Puerto Rico. Commitment to family represented another form of community responsibility, and was often mentioned in conjunction with, or in addition to, physicians' professional and patriotic duty to the broader island. For example, 58-year-old Dr. Padilla explained that it was both his professional work and familial bonds that kept him in Puerto Rico despite career opportunities in the United States:

> I have good offers in the United States, but my work is here in Puerto Rico, doing something good for my society, and my people. I will stay here until the last days of my life. I want to go out on my balcony here in Puerto Rico, look out at the stars, drink a coffee, and say well, I'm not a millionaire, but I was able to give my father a hug on Father's Day. And if my family needs something, has some kind of hurt, I want to be close to them. (Dr. Padilla, Surgeon, San Juan, PR) (translated from Spanish)

For Dr. Padilla, being in Puerto Rico fulfilled both a professional duty to the island and a desire to be close to his family, and in particular to his aging parents. He presented these two goals as harmonious, and stressed that he was prioritizing the important things in life (commitment to community, both in terms of family and country) over the less important (financial gain). However, his vision of Puerto Rico as the ideal location for fulfilling his familial and professional duty was complicated by the absence of both of his daughters, who were living and working in the United States. "They work in things that Puerto Rico does not support," he admitted, explaining that they had been unable to find opportunities on the island in their chosen career paths.

Dr. Padilla's dilemma reflects the large number of young Puerto Ricans who have left Puerto Rico in the wake of the island's extended economic downturn, a development that has complicated traditionally close-knit intergenerational family structures (Mora et al., 2017; Zsembik & Bonilla, 2000). Many physicians with grown children living on the mainland said that they remained in Puerto Rico to provide care and support for elderly relatives. For example, although both of 52-year-old Dra. Torres's children had settled in Florida, she resided in a beach-front apartment in Isla Verde, where she lived with her ailing mother and a full-time nurse. During our interview, a neatly made-up hospital bed sat incongruously among the delicate Edwardian sofas of her white-tiled living room. "I've thought about leaving," she told me. "My daughter wants me to go be with her in Florida. What keeps me here is my mother. My mother on one side, my work on the other." For Dra Torres, both community-oriented medical practice and familial support were responsibilities that could best be completed in Puerto Rico.

While older physicians often stayed in Puerto Rico to help care for sick parents, conceptualizing their presence on the island as a familial duty, younger physicians were more

likely to speak of family in Puerto Rico as an advantageous community support system for themselves and their children. Forty-one-year-old Dra. Díaz, who's extensive network of siblings and cousins all lived within an eight-minute drive of her house outside of San Juan, claimed that remaining in Puerto Rico allowed her to retain a family network she would be unable to replicate in the United States:

> My family is here, that's the primary reason. We're very close, and we celebrate traditions together. My kids know all of their cousins. It's a support system, and I won't find that in the United States. I don't ever see myself leaving. I want to stay here, work here, and contribute here. I understand living here as necessary for the country. (Dra. Díaz, Pediatrician, San Juan, PR) (translated from Spanish)

Although Dra. Díaz expressed the same sense of professional and patriotic duty seen in the narratives of Drs. Padilla and Torres, she described her family on the island as a source of support for herself and her children. Similarly, 36-year-old Dra. Llanos, who's sons were two and five-years-old at the time of our interview, sought to provide her children with an extended familial network as they matured, presenting proximity to family as a singular community asset that outweighed the potential drawbacks of staying on the island:

> I have never contemplated leaving completely. A big part of that is because of my family. Obviously I would get paid more in the United States, but my family would all be here. I prefer to live in Puerto Rico, even if it's not perfect, so that my kids can grow up with their cousins. (Dra. Llanos, Neonatal Physician, Manatí, PR) (translated from Spanish)

Depending on their age, doctors in Puerto Rico participated in diverse community strategies for fulfilling their familial duties. Younger physicians like Dras. Díaz and Llanos were more likely than their older counterparts to have young children at home, and less likely to be responsible for aging and sick parents. For them, extended family on the island was more likely to be seen as a community mechanism for fulfilling an obligation to provide support for their children, rather than as a responsibility to be completed. In contrast, for older physicians, many

of whom were tasked with caring for older relatives while their children worked in the United States, family on the island was a community obligation in and of itself.

Local Responses to the Healthcare Crisis

Boundary-Crossing Within the System

Just as doctors' narratives about staying in Puerto Rico revolved around community commitments to the island and their family, island-based physicians responded to the healthcare crisis through community-centric patterns of resource reallocation that sought to balance providers' professional and patriotic duties to dispense American-style biomedical care and "heal" the island with the practical limitations of the healthcare crisis and Reforma. The first of these strategies involved boundary-crossing between private, public, and departmental sectors of the islands' healthcare system in order to ensure patients' access to medical services. For example, San Juan-based surgeon Dr. Herrera maintained both a public professional position, where he treated Reforma patients, and a private medical clinic, where he only accepted non-Reforma insurance:

> There was a period a few years ago where Reforma stopped paying for 5 months. I stopped taking Reforma in my private office after that. In any case, the income you get from the public system is not enough to support a family, and Reforma is inefficient in the way it administers payment. So now I work in the public hospital half of the week, and I spend the other half at my clinic. Without that, it wouldn't be possible to stay here. (translated from Spanish)

Dr. Herrera dealt with Reforma's low and inconsistent payments by splitting his time between Reforma recipients and affluent patients with non-government insurance, conscientiously employing income streams from across the medical systems' private and public divisions to ensure he was available to provide services to patients from various sectors of Puerto Rico's socioeconomic spectrum. In doing so, he expanded the medical access of indigent patients through the resources of wealthy individuals, redistributing healthcare funding so as to

ensure that impoverished and well-off patients alike would have access to the medical care he provided. Dr. Herrera justified his decision to exclude Reforma patients from his private practice by appealing to financial familial obligations, adding that it would be impossible to stay in Puerto Rico depending solely on a public-sector salary. In framing the elimination of Reforma patients from his private clinic as a necessary measure for his continued presence serving broad segments of the Puerto Rican community, Dr. Herrera transformed this boundary-crossing arrangement from an advantageous economic decision into a community tool for fulfilling his patriotic duty to the island. Furthermore, he saw the conversion of his private office into a non-Reforma clinic as securing the future of medicine in Puerto Rico:

> Right now in my private practice, residents can do rotations and learn renal transplant and advanced laparoscopic surgery. In many ways, my private clinic is a university hospital where I train the next generation of physicians on the island. (translated from Spanish)

Dr. Herrera admitted that he performed more specialized surgeries in his private clinic than in the public university hospital, where he had to "carefully consider what [he told] patients was available," due to a dearth of surgical equipment. This observation puts into perspective how Dr. Herrera's exclusion of Reforma patients from his private practice relates to the broader picture of the island's healthcare crisis, showing its indirect contributions to the low number of Reforma-accessible specialized medical professionals. Nonetheless, Dr. Herrera used his lucrative private clinic as a tool for training Puerto Rican medical residents in highly technical surgical skills, reapportioning the specialized knowledge and expensive technological instruments available in the private sector to subsidize public educational deficiencies and ensure that future island inhabitants had access to advanced biomedical procedures.

Community response through redistribution of specialized skills, technology, and medical funds is only possible if there is something to redistribute, and the current lack of technological

training available in public medical education on the island puts the community strategies of physicians like Dr. Herrera in jeopardy. By teaching specialized medical techniques to the next generation of Puerto Rican doctors, which he specified would be "physicians on the island," Dr. Herrera safeguarded the future ability of Puerto Rico's medical professionals to engage in the kind of re-allocative community efforts he currently practiced. In this way, Dr. Herrera fulfilled his professional and patriotic responsibility to protect the continued availability of highly technical surgery on the island while working within the income and resource limitations presented by the healthcare crisis

Physicians also reported helping indigent patients gain access to necessary care within the resource-poor public sector by boundary-crossing between public healthcare departments, either through facetious referrals to the "wrong" medical division or by calling in personal favors from fellow island-based doctors. Dr. Flores, a university-hospital emergency physician, explained, "I'll refer [patients] to the trauma center to get an ophthalmology evaluation, because [even if they're not a trauma patients], it's the only option." Similarly, Dra. Ramírez, a cardiologist with a private practice where she saw both wealthy and Reforma patients, told me, "I'm lucky I know doctors at Centro Médico.[43] I've been able to make calls to find alternative options for my patients [when specialists are not available]." Departmental boundary crossing was a redistributive community effort that called upon specialists, sometimes quite literally, to offer advanced technological services and biomedical care to impoverished patients that would ideally have been treated by doctors in other divisions of the public sector. Stories of calling in favors

[43] The largest public hospital on the island, located in San Juan. Many residencies and specialized services on the island can only be accessed there. For a history of this hospital and its origins during the Regional Era, see Chapter 3.

were particularly demonstrative of the way that Puerto Rican physicians worked together as a community to get patients the specialized care that they needed.

Finally, almost every single doctor I spoke with described attempting to reallocate resources within the Reforma System by directly challenging for-profit insurance companies that denied patients access to biomedical services. In doing so, physicians boundary-crossed between the healthcare sector, where they were traditionally expected to work, and Reforma's insurance sector, traditionally the arena of healthcare administrators. Doctor' phone calls to Reforma-contracted, managed-care entities constituted a sort of protest against the use of public healthcare funds for business profit. As one doctor explained, "When you're a physician, you look at that situation from the perspective of a service provider. They're just administrators. All they care about is profit." Through their objections to claim denials, physicians strove to restore public medical money to the Puerto Rican community. Dr. Mejía described one such exchange:

> I wanted to change [my patient] to an injectable drug. It was very new, and it was more expensive, and Reforma denied the treatment. I called them up and I said to [the representative] "If you brought your mom to my office, I would want to give her this medication. That's what's best for the patient. If it were your mom, what would you want me to give her?" And she laughed, and she said OK. (Dra. Mejía, Pediatric Rheumatologist, New Haven, CN)

Dra. Mejía sought to improve her patient's access to expensive biomedical treatment by directly confronting Reforma insurance, which she insinuated rejected the medication she prescribed not because it was ineffective, but because it was expensive. In doing so, she successfully re-appropriated medical funds from the for-profit insurance sector back to the medical sphere, where she used it to provide biomedical care to everyday community members. The language Dra. Mejía used in this encounter served to re-center community connections into what was essentially an economic exchange with an administrative representative of the medical market. Instead of arguing for the efficacy of the more expensive medication, Dra. Mejía

redefined her patient as a family member, calling upon the insurance agent to participate in the redistributive community response to resolving the healthcare crisis. In her ethnographic exploration of Reforma insurance in Puerto Rico, Jessica Mulligan (2014) notes that insurance workers in the island's Reforma System are largely Puerto Rican themselves, and see their work in for-profit managed care as a way to improve healthcare on the island. After describing this encounter, Dr. Mejía told me that asking the insurance operator what she would have wanted for her mother was "very Puerto Rican," indicating that she understood and capitalized on the agent's ties to the Puerto Rican community to secure her patient's access to biomedical treatment.

Despite Dra. Mejía's success in enacting a boundary-crossing, community-based redistribution of funds from insurance companies back to the Puerto Rican people, physicians often failed to convince Reforma entities that medications or procedures should be covered. Consequently, indigent patients' claims were regularly denied. Many doctors expressed that repeated failures, and the process of "work, and worry, and calls" that confronting insurance entities entailed, was emotionally taxing. As discussed in Chapter 4, when physicians were forced to participate in administrative duties through Reforma protests, or were unable to ensure patients' access to biomedical care, they often experienced a break in their professional self-concepts, which were centered around a vision of themselves as heroic biomedical providers. As one island-based doctor exclaimed, "Sometimes I feel useless. Why does it have to be this way for things that are necessary?". At the same time, failure to redistribute resources across system boundaries to improve biomedical access for the Puerto Rican community presented an opportunity for island-based doctors to utilize another aspect of their professional self-concepts in their quest to balance a professional obligation to provide biomedical care, a patriotic duty to

"heal" Puerto Rico, and the resource and systemic limitations accompanying the island's healthcare crisis and Reforma System: innovation.

Compensation and Improvising

Doctors on the island often responded to the biomedical barriers, resource limitations, and funding shortages that accompanied the healthcare crisis through community-oriented improvisation and compensation. More specifically, physicians in Puerto Rico collectively balanced their biomedical vision of healing the island and the restrictive realities of the healthcare crisis by prescribing sub-optimal medications, employing medical supplies or personnel beyond their traditional purpose, or making use of readily available, dated medical technology in order to ensure patients' access to biomedical care. When moralizing their re-appropriation of medical materials, island-based providers drew from their professional identities as inventively superior biomedical providers, confidently commending the Puerto Rican medical community for its ability to consistently work together to "do more with less" when compared to its individualistic American equivalent. However, as active participants in Puerto Rico's stigmatized medical sphere with a tenuous grasp on American-style professional legitimacy, physicians working in Puerto Rico struggled to articulate the limitations of their creative community solution to the island's healthcare problems. In contrast, mainland doctors whose professional status was protected by the prestige and biomedical resources that accompanied their move to the United States more openly acknowledged the potential negative impact of community-focused innovation on Puerto Rican patients' healthcare outcomes.

In order to successfully provide patients with the healthcare they required, island-based doctors described practicing community-based, improvisational utilization of personnel, technology, and medication:

> I tell my patients "Look, we're going to operate. We're going to use this technology, and it's not the latest, but it's what we have, and we've used it before, with good results. The nurse will not be available afterwards. You won't have a lot of help, so you are going to need to do your part. I'm going to be there, but your family is going to have to help too, because there is no other way." (Dr. Ortiz, Surgeon, Ponce, PR) (translated from Spanish)

> I've been to places in the United States where they have so many supplies, the latest monitor, the latest special camera. You ask for red, purple, and blue tweezers, and they'll give you exactly that. And [doctors in the United States] will ask me "How would you do this surgery?" And I say "Well, I would use this older lens, and these tweezers, and this thing, and that…" And the look at my like *(eyes narrowed, brow furrowed, imitating a look of pure confusion)*. And I say "If I had what you have, I would use that. But I have this." Doctors in Puerto Rico are just doing the best they can…granito a granito, tratamos de poner un granito más para que las cosas estén mejor[44]. (Dr. Padilla, Surgeon, San Juan, PR) (translated from Spanish)

> I don't think this has affected my ability to care for my patients. In the states, people would call me to ask whether their insurance was covered. Here, they know we're going to find a way to provide them care. I always try to compensate…I'll tell them "I would love to give you this medication, but we'll do this one, because it's cheaper." I have memorized the CVS and Walgreens four-dollar medication list, which you can get even without insurance. It's my *Walking Dead* list, what you would need in a zombie apocalypse. (Dr. Flores, Emergency Medicine, San Juan, PR)

In each of these excerpts, island doctors detailed inventive use of substandard resources to ensure patients' access to biomedical care, but also exemplified the community focus of their resourceful responses to the healthcare crisis. Dr. Ortiz dealt with personnel and technological shortages in his hospital through adaptive utilization of imperfect medical technology. However, he also depended on a community approach to health, specifically through the participation of patients' family members, to ensure that creatively executed surgical procedures were ultimately successful. Dr. Padilla described similar application of dated medical supplies, and implied that his strategy of "doing the best he could" with what he had was practiced by physicians across

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[44] *Granito a granito, tratamos de poner un granito más para que las cosas estén mejor*. Small grain after small grain, we try to put one more small grain so that things will get better. Little by little, we try to do a little more so that things in Puerto Rico will improve. Grain may refer to a grain of rice, or a grain of sand.

Puerto Rico as part of a collective effort to improve the island's situation. Through this phrasing, Dr. Padilla infused doctors' innovative biomedical endeavors with nationalistic, community-focused significance that echoed physicians' ideal of "healing" the island. Finally, Dr. Flores referred to his compensatory collection of inexpensive, second-choice medications as one of the reasons patients in Puerto Rico knew that "we," the broader community of Puerto Rican doctors, would find a way to provide them care.

Physicians openly admitted that adaptive strategies were not their first choice for treating patients. One doctor confessed that she felt like she had to "hacer de tripas corazónes," or literally "make hearts from guts," making do with what was available even when it went against her preferences. At the same time, most providers in Puerto Rico were adamant that through their creativity, they achieved the same medical results as they would have under less difficult circumstances. In some ways, this confidence was a reflection of physicians' professional identities, which presented them as superior to their American counterparts for their innovative ability to provide biomedical treatment under less-than-ideal conditions. As can be seen in both Drs. Flores and Padilla's excerpts above, island doctors regularly compared their necessarily inventive techniques to the by-the-book, resource-rich medical practice of physicians in the United States. However, island doctors' confidence in their ability to apportion care to patients despite the healthcare crisis was also connected to their faith in the efficacy of community-based responses to care dilemmas. Dr. Ortiz expressed certainty in the success of his surgeries because he knew that patients' families would participate in the recovery process. When discussing the effectiveness of his medical innovation, Dr. Padilla referenced its impact on the larger Puerto Rican community through the collective efforts of Puerto Rican physicians. Dr. Flores went further, implying that the community approach to health practiced in Puerto Rico, where doctors

worked together to "find a way" to apportion care regardless of the situation, was superior to the individualistic methods of doctors in the United States, where patients were often unsure if they would receive medical assistance based on their insurance coverage.

Dr. Flores compared the type of medicine he practiced to a "zombie apocalypse", conveying a sense of desperation that clashed with his confident characterization of community-apportioned medical care. In general, island-based physicians struggled to articulate the limitations of their precariously creative, second-choice, collective responses to the healthcare crisis. In contrast, doctors who had moved to the mainland were more willing to acknowledge the potential health implications of this type of innovation. Dra. Nuñez, a surgeon who had moved to Minnesota in 2011, confessed that working in the United States made her more aware of how healthcare outcomes in Puerto Rico might have been impacted by the healthcare crisis:

> Sometimes, you knew that if you were in different circumstances, your patient would be better off. You knew it. Especially now that I'm working in the United States, with all these resources, I know we could save so many people there. But, well. Unlike [in the United States], you do learn to adapt. You learn to do the best you can day by day. And you learn from your fellow doctors that are also fighting day after day to be better. (translated from Spanish)

Dra. Nuñez and other mainland-based physicians may have been better able to discuss the consequences of Puerto Rico's healthcare crisis on healthcare outcomes than doctors on the island in part because of their U.S.-based professional context. Physicians in the United States had relative distance from medical work on the island, and their presence on the mainland raised their professional status, garnering them access to prestigious positions, higher salaries, and more advanced medical technology. In contrast, the possibility that the healthcare crisis was impinging on medical results in Puerto Rico was a threat to the professional status of physicians working on the island, whose legitimacy under American medical hegemony was already imperiled by their direct connection to Puerto Rico's "inferior" medical sphere. The potential failure of the

community solution brought into question the quality of island doctors' medical work, regardless of whether that quality suffered because of a lack of medical skill or a lack of resources. Both groups positioned Puerto Rican doctors as superior to their U.S. counterparts on the basis of the exceptional improvisational skills they developed in response to the healthcare crisis. However, island-based physicians further protected their professional status by expressing confidence in improvisational community responses to healthcare problems and refuting the possibility that the health of their patients might be threatened by the impact of the island's failing medical system on medical services.

Subsidizing with Personal Labor and Funds

Improvisational and boundary-crossing community responses to the healthcare crisis saw physicians in Puerto Rico attempting to shift and stretch existing funds and resources from inside the healthcare system in order to balance colonially-influenced ideals of broadly-accessible, American-style, biomedical care and nationalistic medical purpose with the atmosphere of medical scarcity within which they practiced. In contrast, when doctors subsidized the healthcare system with their own personal resources, they often redistributed assets from outside of the Reforma System into the medical sphere. Investment of personal labor and funds was a stark illustration of physicians' assertive, community-focused commitment to improving healthcare conditions in Puerto Rico, and was often presented through language that echoed providers' heroic self-concept as patient protectors from Reforma's profit-oriented medical market. For example, Dra. Mejía said that after ending her contract with Reforma when they refused to cover a patient's MRI, she allowed indigent individuals to pay for their visits with "flan, cookies, and avocado from their backyard." In doing so, Dra. Mejía fulfilled her professional responsibility to the island and her patients through community-centric reallocation of her own income, providing

medical expertise for little to no payment while still inviting poor community members to contribute to her efforts with the few resources they had at their disposal. Furthermore, the decisively island-centric nature of the alternative payment Dra. Mejía accepted, including avocado from native Puerto Rican trees, reinforced the community focus of her response, almost as if the island itself were a community member invested in its own healing.

Like Dra. Mejía, Dr. Santos explained that he saw most of his patients for free, despite accepting Reforma at his clinic:

> I can't work with the Reforma System. How am I supposed to pay for the needs of 1,000 patients, including labs tests, referrals, and hospitalizations, with only $6,000 a month? I have patients with multiple conditions that need multiple labs and tests, so I run my clinic at a loss. I don't make any money. I just can't see healthcare as a business. (Dr. Santos, Family Medicine, Arecibo, PR) (translated from Spanish)

Dr. Santos dealt with the strain of GroupCare Pueblo's economizing strategy of capitation by spending his entire Reforma budget on patients instead of taking home a salary, an option made possible by his wife's lucrative career as an endocrinologist. Liberating himself from Reforma allowed Dr. Santos to regain his professional power within the clinic, and he was able to perform the biomedical procedures he thought were necessary without system interference. In addition, use of his own funds enabled Dr. Santos to distance himself, and his patients, from the "business" of medicine. Dr. Santos safeguarded his patients' right to biomedical care, including "labs and tests," from the capitalistic tendencies of the medical market by reaching into his own pockets. In this way, he fulfilled his responsibility to biomedically heal the island within existing resource limitations, redistributing personal funds into the medical arena for use by the broader Puerto Rican community.

Dr. Santos's open distaste for the island's capitalistic medical market was a common sentiment among physicians who personally helped finance patients' medical care. As Dr. Francisco explained:

> The problem with the new system is that we decided to give public healthcare money to a private company. If I give a baby to a crocodile and the crocodile eats the baby, it's my fault, because I gave it the baby, right? Puerto Rico survives because there are good people here. We feel a commitment to the island, and we are here because we want to help. But doctors buy things continually. There have been expensive medications that patients can't afford, and physicians themselves buy those medications. (Dr. Francisco, Pediatric Nephrologist, San Juan, PR) (translated from Spanish)

Dr. Francisco interpreted Reforma insurance companies as inherently predatory, casting Puerto Rican patients as innocent victims fed to the island's voracious medical market. At the same time, he used "we" when describing GroupCare Pueblo's implementation, indicating an understanding of the healthcare arena as dependent on the efforts of the broader Puerto Rican community. Despite implying a degree of collective blame for the healthcare crisis, Dr. Francisco also referred to "good people" in Puerto Rico working together to fix healthcare failures, and positioned himself and other Puerto Rican physicians in noble, patriotic opposition to Reforma's immoral capitalist aims. For Dr. Francisco, healthcare was a community endeavor, and doctors' personal funding of patients' access to biomedical treatment when the system failed them was part of a cooperative redistribution of resources.

Dr. Francisco conceptualized his sacrifices to improving healthcare in Puerto Rico not only in terms of financial and labor contributions, but also with regards to lost professional prestige. He explained that after working in Houston, Texas for 10 years following a fellowship, his 2005 move back to San Juan forced him to surrender professional opportunities accessible on the mainland:

> My dream was to help the people of Puerto Rico, and I tried to return many times. In the end, I had to make a position for myself. I had to seek out grants to pay my salary

> because there is never money. I had to set up my own interview. And it was like… I'm paying for my move, I found myself a salary, I set up this interview, do you want me? And they finally said yes…[But] in Houston, I was publishing a lot. Here, there aren't resources or time to do research. After two years back on the island, I closed my lab. (translated from Spanish)

Dr. Francisco balanced his duty help the Puerto Rican community with the limited medical funds available on the island by laboring to acquire financial support for his salary from outside of the island's medical system. He described time and effort sacrificed to create a space within Puerto Rico's resource-poor healthcare arena where he could feasibly embody his ideal of patriotic medical service. Moreover, Dr. Francisco explained that to provide care on the island, he was forced to surrender the professional prestige available to him in the United States, reinvesting energy spent on research endeavors into active, community-oriented patient care.

Doctors' ability to engage with direct subsidization of the Reforma System when balancing their patriotic, biomedical ideals with the resource limitations of the healthcare crisis was dependent on their individual circumstances. Dr. Santos's commitment to healthcare as a human right, biomedical accessibility, and professional autonomy could only be fulfilled through the flexibility afforded to him by his spouse's income. Dr. Francisco's presence in Puerto Rico was only possible because he had the time, energy, and skills to apply for external grants, and came at a direct cost to his professional status through the loss of research opportunities. Finally, Dra. Mejía, who like Dr. Santos sought to provide Puerto Rican community members with access to biomedical care through her own funds, eventually moved to mainland, explaining that work in Puerto Rico became "unsustainable." Dra. Mejía's experience illustrates the limitations of direct investment in the community healthcare strategy, showing how without sufficient resources to redistribute, doctors' efforts were rendered impossible.

Boundary-crossing, improvisation, and subsidizing through personal resources each represents a socially-embedded tactic physicians in Puerto Rico employ to complete their professional and patriotic obligations to the island within the confines of the healthcare crisis. Island-based doctors' efforts are community-focused and biomedically centered, drawing from heroically-superior professional self-concepts and reflecting colonially-influenced ideals of broad biomedical accessibility to implement a collective vision of "healing" the island through direct medical practice and improvisational resource redistribution. Island physicians' focus on biomedicine is undoubtedly tied to ideals of American-style medical care, and to doctors' interest in maintaining their professional status under the umbrella of American medical hegemony. At the same time, physicians in Puerto Rico make tangible sacrifices that illustrate how biomedicine serves as an authentic value through which to orient community efforts aimed at improving and expanding medical care on the island. Even as doctors that remain in Puerto Rico are able to directly serve Puerto Rican patients and retain geographic proximity to the Puerto Rican community, they describe forfeiting professional prestige and income they might gain through a move to the mainland, and willingly invest personal money and labor into the health of Puerto Rican people. Island doctors' descriptions also demonstrate the failure of the neoliberal Reforma System. Despite purporting the economic and healthcare efficacy of a for-profit, business-like, managed-care approach to health, Reforma is largely supported by local and, as will be discussed in the next section, cross-Caribbean redistributive community efforts.

Mainland-Based Responses

Physicians left the island for a variety of reasons, but most said that they moved to the mainland in the hopes that they could provide themselves, and their families, a better quality of life. Moving to the United States alleviated the direct pressure of Puerto Rico's healthcare crisis

on physicians' everyday lives, providing greater financial stability and allowing doctors to solidify their professional status through increased access to biomedical care and training. At the same time, being away from Puerto Rico was accompanied by the loss of direct access to island-based community networks and Puerto Rican patients. In order to moralize leaving behind family, friends, patients, and a homeland suffering from healthcare and economic turmoil, many Puerto Rican doctors presented their departure as a forced exile.

Despite their geographic distance from Puerto Rico, U.S.-based doctors still sought to balance their belief in biomedical superiority, their commitment to "healing" the island, and the practical limitations that accompanied their move to United States. Doctors on the mainland engaged in two distinct, socially-embedded, redistributive, community responses to the healthcare crisis, each shaped by their U.S. surroundings. First, mainland providers asserted that Puerto Rican physicians' ability to creatively ensure access to care and connect with patients emotionally were unique skills lacking in their American co-workers. By drawing upon professional identities centered on creative biomedical superiority and leaning into Puerto Rico's community-focused doctrine of medical practice, physicians that moved to the United States framed their medical service in the U.S. as an important, previously-unavailable resource that improved care for American patients. Second, mainland physicians worked to bring biomedical techniques and expertise from the United States back to the island, and described these medical exports as a way to continue contributing to the well-being of Puerto Rico from afar. However, as biomedicine became the dominant factor organizing mainland physicians' professional lives, they stopped describing their medical work as a nationalistic endeavor.

Why Do They Leave?

Quality of Life and Forced Exile

Physicians who came to the United States for work cited higher quality of life, for both themselves and their families, as an important factor impacting their movement away from the island. While doctors who left Puerto Rico soon after completing their residencies usually understood their move as a rational choice in response to better circumstances abroad, physicians who left after multi-year careers on the island were more likely to suggest that they moved because there was no other option. For example, Dr. Jiménez, a family physician who moved to Dallas a few months after completing his residency in 2015, explained that he was drawn to the United States for professional and personal reasons:

> The best offer I got in Puerto Rico was to work 6 days a week and make 120 grand. But it was 6 days a week. And the lowest offer I got here was 160 working 5 days a week. When you compared things, the lower crime, the better job offers – your car loans, your student loans, they cost the same wherever you live. Leaving Puerto Rico, I could save for my kids' college faster, provide for them better. The public schools were better. I didn't have to worry about walking around at night. So I decided yes, I would go outside of Puerto Rico.

Dr. Jiménez presented his move as an expedient response to a more favorable situation, citing lower crime rates, higher pay, less hours, and an increased ability to provide for his children. While he admitted that some of his patients expressed sadness that they would no longer be able to see him, he also asserted that they "knew [he] would only be around for three years," insinuating that his obligation to them had been fulfilled by the end of his residency and that his community responsibility was now focused on providing for his family. In contrast, physicians like Dra. Mejía, a pediatric rheumatologist who moved to the mainland in 2016 after spending years establishing herself on the island, expressed devastation at the "forced exile" that separated them from their patients:

> Leaving my patients was the hardest thing I've ever done. I cried, they cried. It was the most painful goodbye *(Her voice cracks. We're on the phone, but it sounds like she's crying)*. They trusted me with their health, with their personal issues, and they had chronic diseases, required ongoing treatment. I trained at the best centers in the United States so that I could go back home and help, you know? But I wasn't being paid. It was unsustainable.

During this exchange, Dra. Mejía implicitly recognized the monetary pull of her position in the United States, and later in the interview she commented that the relaxed pace of her Connecticut post meant that she could pick up her children from school, something that would have been impossible in Puerto Rico. However, despite the draw of a higher quality of life on the mainland, she saw leaving Puerto Rico not as a rational choice, but as an involuntary departure. Dra Mejía asserted that her medical training had always been aimed at serving the Puerto Rican community, and more specifically at being part of an island-based solution to improving healthcare for Puerto Rican people. By framing her move to the mainland as out of her control, Dra Mejía passionately upheld her devotion to "healing" the island.

In part, the differences between the narratives of established and newly graduated mainland doctors reflected their contrasting experiences with the healthcare system on the island. Established doctors were more likely to have private offices that needed constant funding to run, and had usually spent years investing time, income, prestige, and energy into island-based community responses to the healthcare crisis that were ultimately deemed unviable. In contrast, recent graduates like Dr. Jiménez were both less fatigued and more insulated from the frustrating realities of the medical system in Puerto Rico. At the same time, describing their move to the United States as out of their hands was a way for established physicians to moralize leaving the island, which they might have felt more pressure to do in the face of close patient relationships that younger doctors had yet to form.

Training in the United States

Despite the difficult conditions created by the healthcare crisis, about half of the mainland-based doctors I spoke with said that they initially left Puerto Rico for specialized fellowships in the United States, rather than in direct response to the situation on the island. For example, Dr. Martinez, a pediatric oncologist working in Houston, explained that the hematology training that originally brought him to Texas didn't exist in the commonwealth:

> Right now, they actually don't have a program at all. Back then they had it, but they needed to recertify. And it wasn't research-driven like the one I did here. Now, the pediatric residency [at UPR] was amazing, better than in the United States. They give you independence, let you be proactive. But the hematology program [on the island] wasn't a good option.

Dr. Martinez's move to the mainland was motivated by a desire to continue his medical education, which he claimed would have been impossible in Puerto Rico. In describing why he rejected the fellowship program on the island, he revealed priorities that adhered to a biomedical focus on prestigious laboratory research and reflected the importance of valid American credentials, both foundational elements of professional status under American medical hegemony. At the same time, Dr. Martinez leaned into a self-concept that characterized Puerto Rican physicians as superior to doctors trained in the United States, insisting that the pediatric residency program he completed on the island surpassed mainland alternatives by teaching medical students to become "proactive" providers. Of course, as many doctors pointed out, the "independence" that residents were granted in Puerto Rico was most likely related to the general shortage of medical workers on the island, which necessitated that less-experienced physicians be utilized more heavily as part of a community solution to keep up with healthcare needs. However, like Dr. Martinez, most doctors saw the early autonomy that accompanied Puerto Rico's healthcare crisis as leading to better training than what was available on the mainland.

It was common for physicians to describe their educational forays in the United States in biomedical terms, citing research opportunities and specialized technical procedures that were rare or unavailable on the island. Physicians based in Puerto Rico who had trained on the mainland often spoke of learning skills with the goal of bringing them back to Puerto Rico to better serve the island community. For example, Dr. Flores, who completed a fellowship in New Jersey before moving back to San Juan, told me, “I even put it in my application, that I wanted to come back and use what I learned [in Puerto Rico].” This nationalistic motivation was rarely expressed by Puerto Rican doctors who remained in the United States after completing their specialties. However, almost every single mainland-based physician I spoke with who traveled to the U.S. for medical training said that they had initially seen their move as temporary. This included Dr. Martinez, who revealed:

> When I left, the plan was to go back. All our family was there. But I got offered this position in Houston, and I bought a house, I settled here with my wife. My kids were born here. I interviewed in Puerto Rico a bunch of times. But it seemed like the situation was going in a downward spiral. It’s been a slow transition, but I realize now that I might never find a good position there. At this point, they are not going to be able to afford my position.

While Dr. Martinez had hoped to return to the island, where his would be close to his family, he stayed in the United States in large part because the “downward spiral” of the healthcare crisis prohibited Puerto Rico from offering professional positions comparable to his job in Houston. Even as he mentioned a disparity in monetary compensation, he framed his presence in the United States as somewhat involuntary, stressing that he attempted to return to the island on multiple occasions. His wording also insinuated a sort of temporality to his presence on the mainland, saying that “at some point” Puerto Rico would be unable to afford him without fully admitting that this point might have already come.

Dr. Martinez's "slow transition" to staying in the United States was echoed by many mainland-based doctors, and may explain the lack of nationalism in their educational narratives. Physicians who returned to Puerto Rico and directly applied their specialized skills on the island could draw from their ideal of "healing" the island to moralize their temporary move to the United States as a patriotic endeavor. In contrast, doctors who stayed on the mainland were forced to contend with their decision to learn biomedical skills, increase their professional status, and receive a monetary boost without returning to fulfill their obligation to Puerto Rico and its people. As a result, mainland Puerto Rican physicians socially embedded in a professionally-advantageous, overtly-biomedical American context eschewed nationalistic interpretations of their medical training.

Dr. Martinez's hesitancy to fully commit to staying on the mainland was expressed by all of the mainland doctors I spoke with, regardless of their initial reason for moving. As Florida-based Dr. Lopez explained to me, "Every day I think to myself, when will I get the opportunity to return? If I could, if things weren't the way they are, I would already be there." For some, this sentiment may have helped relieve the tension of remaining in the United States by creating a sense that their duty to work in Puerto Rico could still be completed. However, these sentiments also illustrated genuine grief over the cost of moving to the mainland. It was not simply that mainland physicians regretted moving to the United States. After all, most characterized their presence on the mainland as unavoidable, and spoke positively about their new lives. Rather, what Dr. Lopez and others relayed was a sort of regret that moving had been necessary in the first place, that they were "forced" to give up their communities, family, friends, and homeland to pursue the kind of professional and personal existence they deemed acceptable. "I never planned to live away from Puerto Rico," admitted Orlando-based Dra. Silva. "I wanted to raise

my daughters with my family. I wanted to be close to them and have their support. But after we saw the opportunities [in the United States], we knew we needed to leave."

Cross-Caribbean Responses: Serving Community in the United States

Redistributing Puerto Rican Care to American Patients

Moving physically separated mainland physicians from the Puerto Rican community and stunted their ability to serve Puerto Rican patients through everyday medical practice. Nevertheless, U.S.-based doctors participated in their own brand of redistributive, community-oriented responses to the healthcare crisis. Through these practices, Puerto Rican doctors in the United States sought to resolve the tension between the ideal of broadly-accessible biomedical care, their continued commitment to "healing" the island, and the geographic limitations and professional advantages that accompanied their participation in the mainland's well-stocked medical arena.

First, mainland doctors conceptualized their presence in the United States as a way to share superior, Puerto Rican-style healthcare with mainland communities. Just as island-based doctors worked to redistribute resources on the island to better serve Puerto Rico, mainland-based physicians saw themselves as closing service gaps in the United States by reallocating their innovative skills and warm approach to medicine from the island to the United States. In exporting Puerto Rican-style community care, mainland physicians drew from their Puerto Rican professional identities as high-caliber, creative biomedical practitioners, and preserved professional and personal ties to Puerto Rico by openly integrating their ethnic identities into their clinical practice.

Like island-based physicians, doctors on the mainland spoke extensively about the unique ability of Puerto Rican medical professionals to improvise in the face of less-than-ideal circumstances. They also understood this skill as an important advantage for their U.S. patients:

> Medicine in Puerto Rico and the United States is practiced the same way, but in Puerto Rico, you have less resources. So you learn to invent. And I think that has helped me serve patients here [in Florida] too. I'm more open to taking on difficult cases [than my co-workers] because I know I can figure out a way to get things done with good results. (Dr. Trujillo, Surgeon, Orlando, FL) (translated from Spanish)

Dr. Trujillo presented his ability to "invent" solutions to medical problems and still achieve "good results" as a rare strength within his United States context, where he said that doctors were often uneasy with taking on difficult medical cases where the path forward was unclear. Moreover, he connected his innovative skill-set with expanding the biomedical access and well-being of patients in the United States, indicating that he was willing to operate on individuals that his co-workers refused to care for. Dr. Trujillo's integration into the United States medical arena transformed his improvisational Puerto Rican medical abilities into a scarce resource, and he conceptualized his presence in the United States as a way to serve the U.S. community by redistributing inventive medical service from a context of creative abundance in Puerto Rico to a context of inventive deficiency on the mainland.

While doctors in Puerto Rico deliberately separated their Puerto Rican identities from the clinical sphere, many mainland-based physicians identified their Puerto Rican culture as a professional asset. For example, Dra. Sanchez, a surgeon in Florida, pointed out:

> [In my current position], I still get to help people, which is what I like. And I get to help people who want something more. Anybody can visit a doctor, but in Puerto Rico, the culture is very warm and inviting. And I think that growing up in Puerto Rico, where there is an expectation that a doctor should be warm, and that a conversation shouldn't be transactional, has been a benefit. Doctors here aren't like that, but it complements the medicine and helps patients open up.

Dra. Sanchez was straightforward about integrating Puerto Rican culture into clinical encounters, contending that it "complemented" her medical efforts by enabling her to connect with patients looking for something beyond the typical U.S. medical experience. Like Dr. Trujillo, she seemed to present her Puerto Rican medical skills as a limited and advantageous resource to be shared with U.S. patients, and even saw her warm demeanor as protecting patients from "transactional" encounters, much like island doctors protected Puerto Rican patients from the "business" of medicine. Dra. Moreno, a Texas-based renal nephrologist, specifically connected her stubbornly warm approach to care to a positive change in the medical culture of her hospital community, saying:

> When I first came here, it may have been a little bit shocking how I was for my colleagues. I'm Puerto Rican, so I'm more invested, more personal. But I made a conscious effort not to change that, and the feedback I get from families is really good. I think that me being here has helped change the culture [at my hospital] to one that is more open, more communicative, and more warm than other environments. It wasn't like that before, but I have pushed for it, to bring that into medical practice.

Dra. Moreno specifically spoke of her warm approach to patient encounters as leading to the collective, beneficial transformation of her medical community, saying that patients appreciated the open, communicative style of practice she promoted at her hospital. Her experience illustrates that physicians in the United States saw their Puerto Rican-style warmth not only as a redistributive resource, but also as part of a community solution to improving medical care on the mainland.

Mainland physicians' willingness to explicitly incorporate Puerto Rican culture into their medical practice may reflect specific attributes of their active participation in mainland medicine. Unlike doctors on the island, U.S.-based physicians' professional legitimacy under American medical hegemony was not threatened by working on a "medically inferior" island with limited access to biomedical resources. However, their move to the United States did separate them from

proximity to the Puerto Rican community, and from a sense of patriotic purpose in their everyday professional lives. In contrast, island physicians were more easily able to conceptualize their medical practice as a nationalistic service aimed at "healing" the island. At the same time, they were obliged to defend their professional legitimacy in the face of their active connection to Puerto Rico's stigmatized professional sphere, which they did in part by downplaying the impact of their personal connection to Puerto Rico on their medical work. Although the mainland doctors' focus on serving American patients through Puerto Rican community care did not directly contribute to "healing" the island, it succeeded in assuaging their loss of professional patriotic purpose by allowing U.S.-based doctors to assert their Puerto Rican identities within their everyday medical practice.

Serving Puerto Rico from Afar

Even after moving to the United States, many Puerto Rican doctors continued to contribute professionally on the island through community-oriented efforts to redistribute biomedicine from their resource-rich U.S. context to the island's struggling healthcare sector. In doing so, mainland physicians were able to realize their ideal of "healing" the island by expanding biomedical access in Puerto Rico from their posts in the United States. As Dra. Nuñez relayed:

> I help family and friends over the phone with medical questions. Every time I go back, I try to give a conference, talk with residents, and take the ideas and skills I have learned here back to the island. My doctor friends call me all the time and ask me how we do things here, and I share medical information and surgical techniques. The patients in Puerto Rico, they are my parents, my aunts and uncles, my friends. I want to help, but the problems there are so big. This is what I am able to do. (Dra. Nuñez, Surgeon, Rochester, Minnesota) (translated from Spanish)

Dra. Nuñez indicated that she wanted to take the professional knowledge she had acquired on the mainland back to Puerto Rico in order to improve the healthcare crisis, and

mentioned continued personal ties to the Puerto Rican community that her efforts sought to aid. The particular strategies she enumerated, including providing medical information to potential patients and sharing surgical techniques with island-based physicians, seemed to center around biomedical expertise. In fact, biomedical aid was a common theme among physicians who described continued professional services to the island, with one nephrologist in Dallas claiming that almost 10 years after leaving the island, he still traveled to Puerto Rico every three months to check on former patients and run transplant evaluation clinics. Doctors on the mainland did not conceptualize their actions in overtly nationalistic terms, but their healthcare contributions mirrored the community efforts of island-based doctors patriotically working to increase Puerto Rican patients' access to biomedical services. While island-based doctors provided Puerto Rican patients with direct biomedical and financial assistance, mainland-based doctors alleviated the island's dearth of medical training and access to biomedical expertise by diligently sharing the knowledge and skills they had gained in the United States. In this way, mainland-based doctors biomedical aid to Puerto Rico not only helped relieve the tension between their patriotic duty to the island and their decision to move to the United States in search of better professional opportunities, but also became part of a trans-Atlantic community endeavor to alleviate the healthcare crisis through the redistribution of medical resources.

In addition to more routine shows of medical aid to Puerto Rico, doctors in the United States expressed that Hurricane Maria provided a unique opportunity to support medical efforts on the island. Several physicians described personally mailing supplies to former co-workers as part of the larger medical relief effort. Dr. Delgado, a neurologist who had moved to Houston only a few months before the storm, declared that his presence in the United States gave him a unique ability to help the island:

> When the hurricane happened, it's one of those things where you don't even think about it. You just start putting together the money, buying generators, getting medical supplies. I may not physically be there, but being in Houston allowed me to help Puerto Rico in a way I have never been able to. For the first time in my life, I actually feel like I was a huge help to the island.

Dr. Delgado left the island reluctantly after years of delayed payment from the private hospital he worked at left him in debt, and told me that moving to the United States had been especially difficult for him because he had specifically studied medicine with the goal of serving the island. Through his work collecting donations after Hurricane Maria, Dr. Delgado was able to find patriotic purpose in his move to the United States. Although he had originally left Puerto Rico for financial stability, he re-conceptualized his presence in Houston as a way of more effectively fulfilling his duty to the island and its people. While Dr. Delgado's understanding of his move to the mainland was somewhat uncommon in its nationalistic optimism, island-based physicians spoke about the contributions of Puerto Rican doctors on the mainland following the storm in similar ways. Dr. Francisco, who was based in San Juan, explained:

> I think people who leave want to help, and love Puerto Rico, but they have families. They want to live somewhere safe. And I actually think that you can help equally from outside. After Maria, it was Puerto Rican doctors in the United States who really helped. More than me, actually. All I could do was walk around the street looking for people that needed help, but I didn't have the resources that they did. They're not on the island, but their hearts are with the *pueblo*. (translated from Spanish)

Like Dr. Delgado, Dr. Francisco insisted that Puerto Rican physicians on the mainland had been vital instruments of aid following the 2017 storm, illustrating an awareness of how essential the participation U.S.-based physicians is in the community struggle to provide healthcare on the island. Furthermore, Dr. Francisco presented this assistance as evidence that the hearts of Puerto Rican physicians on the mainland remained with the island. Puerto Rican doctors on the island were adamant that they bore no animosity towards physicians who had moved to the United States. "Those people have suffered" explained one surgeon. And more

commonly, almost as a refrain, “We have all thought about it.” As Puerto Rican doctors on the mainland struggled to relieve the tension between their desire to biomedically heal the island and their decision to move to the United States by redistributing their newfound resources to improve healthcare in Puerto Rico, island-based physicians created space for their efforts, interpreting them as patriotic overtures and enfolding them into a larger community endeavor.

Duany (2000) argues that as a result of the bilateral flow of Puerto Ricans between the island and mainland, Puerto Ricans have constructed an identity that exists “at the crossroads of [the border between here and there],” (p. 22) and is based on a shared culture rather than shared territory. In conceptualizing the medical aid of mainland-based doctors as motivated by love for the island and envisioning their efforts as part of a broader community movement, doctors in Puerto Rico asserted a Puerto Rican professional identity that transcended the island’s borders. By doing so, they laid the groundwork for moralizing their own potential move to the mainland, and for their continued participation in “healing” Puerto Rico regardless of their location. In fact, this was exemplified by Dr. Rodríguez, who admitted that he was leaving Puerto Rico for a fellowship in Missouri, but assured me “I would be Puerto Rican, even on the moon.[45] And I know that I am a Puerto Rican physician.”

Mainland-based doctors’ efforts to serve American patients through the innovative warmth of Puerto Rican-style community medicine, and their commitment to sharing the biomedical expertise and materials gained through their move to the United States with the island, both represent redistributive, community responses to the healthcare crisis that seek to

[45] References a song by U.S.-born Puerto Rican musician Roy Brown Ramirez’s 1997 “Boricua en la luna.” The lyrics tell the story of a fictional character’s birth to Puerto Rican migrants in New York, and his subsequent journey to claiming his Puerto Rican heritage despite his birthplace. The song declares that the protagonist would be Borincano (Puerto Rican, from the Taíno word for the island, Borinquen), even if he had been born on the moon.

balance the ideals of biomedical superiority and "healing" the island with the practical material and geographic limitations of their move to the United States. While doctors in the U.S. lose physical access to the Puerto Rican community and renounce a sense of nationalistic purpose in their medical practice, the elevation in prestige, income, and materials that accompanies their U.S. context allows them to openly incorporate their Puerto Rican identities into their clinical practice and retain a sense of everyday professional connection to the island. Moreover, mainland-based doctors' actions, in particular with respect to exporting biomedicine to Puerto Rico, build on the efforts of island physicians, revealing that providers' community-solution to the healthcare crisis is not only context-specific, but also cumulative. Moreover, these cross-Caribbean collective exercises constitute the informal foundation of the Reforma System and its GroupCare Pueblo approach to health. Healthcare in Puerto Rico functions not through business-like efficiency, but through the struggles and sacrifices of the Puerto Rican community and Puerto Rican doctors in particular, who channel their ideal of biomedicine into a collective vision for "healing" the island.

Conclusion

When constructing and moralizing their responses to the healthcare crisis, island and mainland-based Puerto Rican physicians both leaned on colonially-constructed professional identities centered around creative biomedical superiority, and drew from a colonial legacy of broadly-accessible biomedicine as the best way to "heal" the island. However, despite the similarities in their medical values and self-concepts, doctors on either side of the Caribbean attempted to balance their duty to Puerto Rico and their commitment to biomedicine with the distinct medical markets and social realities that accompanied their embeddedness in the United

States or Puerto Rico. Consequently, each group practiced context-specific, redistributive, community solutions to the complications wrought by the healthcare crisis.

Island-based doctors were forced to deal with Puerto Rico's healthcare problems directly, alternatively reallocating materials, funds, and services across healthcare system boundaries, improvisationally utilizing medical supplies and personnel, and subsidizing Reforma with their personal labor, energy, and money. Doctors in Puerto Rico presented their presence on the island as a patriotic service, and collectively worked to improve the islands' access to "quality" medicine, defined in biomedical terms and dependent on the innovative efforts of medical providers. Island physicians moralized their dependence on sub-optimal, dated technology and medication by confidently emphasizing Puerto Rican doctors' collective creativity in the face of medical scarcity. However, their active participation in Puerto Rico's resource-poor, stigmatized medical context, which threatened their professional legitimacy within the broader arena of American medical hegemony, meant that they struggle to articulate the limits of their community solution with regards to healthcare outcomes, and that they were at loathe to define their everyday medical practice as connected to their Puerto Rican identities.

Mainland-based doctors were provided with more opportunities than their island cohort to increase their professional status through biomedical training, and had greater access to medical resources and financial security. As a result, they were more willing to acknowledge the limits of an innovative community solution to alleviating the impact of the healthcare crisis on Puerto Rican patients' health. However, U.S.-based physicians' departure limited their ability to directly contribute to healthcare on the island, and mainland doctors were at loathe to define their professional lives in patriotic terms. Still, mainland physicians participated in their own, U.S.-context specific, redistributive, community responses to the healthcare crisis. Puerto Rican

doctors in the United States conceptualized their presence on the mainland as a service to U.S. patients, presenting the warmth and innovation inherent to Puerto Rican medical practice as a scarce resource that contributed to the improvement of medical care in the United States. By bringing their Puerto Rican culture into the clinic, a strategy made possible by the improvement in professional prestige that accompanies mainland medical practice, doctors in the United States were able to reclaim everyday connections to the island. In addition, Puerto Rican physicians in the United States attempted to bring their newly acquired biomedical skills back to Puerto Rico to continue helping the Puerto Rican community they left behind. Doctors in Puerto Rico recognized, lauded, and depended on the contributions of mainland physicians, showing that Puerto Rican physicians' distinct, context-specific, community endeavors are part of a larger, collective, cross-Caribbean solution to the healthcare crisis.

Ultimately, Puerto Rican physicians' "relational package" narratives reveal that the island's for-profit, private healthcare system, meant to operate as an efficient business, is instead held together by the informal, redistributive actions of the Puerto Rican community. When doctors in Puerto Rico say that they make do with what they have, that they regularly spend their salaries on patients' medications, that they are constantly fighting for their patients' access to procedures, that patients' families are serving as nurses, when doctors on the mainland say that they work to deliver biomedical knowledge, services, and techniques to the island, they are communicating that on its own, Puerto Rico's healthcare system is not able to effectively provide care. Although Reforma was intended as the neoliberal solution to universal healthcare, in practice, Puerto Rican physicians on and off the island subsidize the for-profit medical market it created through personal, professional, and financial sacrifice. Doctors' stories also show that far from being a facade for improving their professional standing and promoting their professional

interests, Puerto Rican physicians' commitment to biomedicine over a sociomedical approach to health constitutes an authentic foundation for executing their vision of "healing" the island. As this ideal is collectively carried out across island and mainland borders, it comes at tangible personal cost to the Puerto Rican medical community.

Chapter 6: Conclusion

This dissertation tells the moral economy story of medicine in Puerto Rico, from its state-controlled, colonial beginnings under the Spanish regime, to its modernist medical professionalization during early United States imperialism, through its Commonwealth-Era public, private, sociomedical, and biomedical systemic iterations, and into its current, crisis-laden, neoliberal healthcare context.

In Chapter 2, I highlighted how medical development under Spanish and early United States colonial rule was contrived to bolster imperialistic aims and strengthen colonial domination of the island. I emphasized that the exploitative foundations underlying medical progress on the island ultimately promoted conflicting beliefs in government-sponsored universal healthcare access and biomedical superiority over sociomedical principles, and that professionalization through the U.S. regime constructed medicine in Puerto Rico as dependent on, and inferior to, medicine in the United States while encouraging local physicians to view their medical work as a patriotic enterprise. In Chapter 3, I discussed SocialCare, BioCare, and GroupCare Pueblo, three attempted institutional solutions for balancing Puerto Rico's commitment to healthcare as a human right, native doctors' modernist medical culture, and the reality of limited resources after the island became a United States' Commonwealth in 1952. I described that each arrangement carried inherent weaknesses and suffered from the subversive actions of insular politicians seeking parity with the United States and local physicians advocating for their own economic and professional interests. However, in tracing the enactment and ultimate failure of each of these healthcare system, I also exposed that Puerto Rico's colonial context, including its colonially-influenced, contradictory medical values, its economic subjugation to the United States and subsequent high poverty levels, and its undemocratic

political subordination to under-funded, inequitably-applied federal healthcare policy complicated the island's ability to institute a healthcare system that fulfilled its medical ideals and met the healthcare needs of its population.

Puerto Rico's 1993 healthcare reform, Reforma, instituted a neoliberal Groupcare Pueblo approach to health that defined "quality care as preventative, publicly-funded, privately-provided, and best handled by for-profit, business-oriented, managed care entities. However, these systemic changes to healthcare on the island devolved into a healthcare crisis characterized by increased healthcare costs, care-rationing, resource scarcity, and physician shortages as native doctors moved to the United States in search of professional opportunities. Chapter 4 examined how Puerto Rican physicians on and off the island make sense of the healthcare crisis through their professional identities. I explained that doctors reconcile their connection to the island's stigmatized, resource-poor medical sphere, their subordination to American medical hegemony, their dependence on the United States' well-stocked, prestigious healthcare context, and their ideal of widely-available, expensive biomedical care by reframing their ties to Puerto Rico as professionally advantageous. Puerto Rican doctors on both sides of the Caribbean present themselves as superior to their American counterparts by virtue of their island experience, adopting a self-concept based on their innovative ability to achieve American medical standards under difficult circumstances. Doctors on the island go even further, centering their professional identities on their role as heroic protectors of patients' health and biomedical access against capitalistic Reforma insurance companies and self-interested governments. I noted that physicians display an intimate understanding of the connection between Puerto Rican patients' social circumstances and medical conditions, and experience identity breaks when the island's interconnected healthcare and economic crises render them unable to provide biomedical

services. I concluded that doctors' narratives around interruptions to their colonially-influenced, biomedical identities indicate that Puerto Rico would be better served by an explicitly sociomedical approach to care prohibited by its American colonial context.

Finally, Chapter 5 explored physicians' deployment of these professional identities, examining the "relational package" through which Puerto Rican doctors on and off the island respond to, and moralize their responses to, the healthcare crisis. I demonstrated that providers work to resolve the tension between their modernist commitment to "healing" the island and the limits of their respective medical markets, social contexts, and geographic locations through socially-embedded, redistributive, community solutions to the island's healthcare problems. I described how island-based physicians seek to improve patients' access to "quality" biomedical care through direct, adaptive, community-oriented means, which they moralize by emphasizing the creativity of Puerto Rican doctors and the efficacy of their collective actions. I reported that island-based doctors view their presence in Puerto Rico, which keeps them connected to their family, friends, and broader island community, as a patriotic service. However, I also noted that doctors actively working in Puerto Rico's stigmatized medical sphere separate their everyday medical practice from their Puerto Rican identities, and struggle to articulate the legitimacy-threatening limitations of community innovation for mitigating the impact of the healthcare crisis on Puerto Rican patients' health. In contrast, I found that mainland-based physicians separated from the island community but immersed in the United States' biomedically abundant medical sphere are at loathe to frame their professional lives in nationalistic terms, but openly acknowledge the inadequacy of the community solution. I also described that doctors in the United States serve mainland patients by explicitly integrating medically "superior" Puerto Rican community culture into their medical practice, and conscientiously contribute to the well-being

of the island community by sharing the biomedical resources and skills they acquire on the mainland with Puerto Rico. I reported that the collective responses of Puerto Rican doctors on and off the island constitute a cumulative, cross-Caribbean effort to improve conditions in Puerto Rico, and that the island's profit-oriented, business-like Reforma system is tenuously held together by the informal efforts and personal sacrifices of the broader Puerto Rican community.

My findings yield critical insight into the potential future of healthcare in Puerto Rico, both at a local level and with regards to the island's continued colonial relationship to the United States. Specifically, this investigation draws attention to the impracticality of a neoliberal or biomedical approach to Puerto Rico's resource-poor healthcare market, and emphasizes the destructive implications of continued U.S. colonial influence over the island's interconnected economic and medical arenas. However, analyzing the moral economy of medicine in Puerto Rico reveals more broadly how colonialism impacts medical values, medical organization, medical provision, and medical development in the colonized Global South. While Puerto Rico's story reiterates the observation by other scholars (Connell, 2007; Go, 2016; Lo, 2002) that colonial projects are mutually constitutive, it also highlights how contradictory colonial foundations and continued imperialistic influence practically and ideologically shape and restrict healthcare on the periphery at both an institutional and an individual level. Moreover, Puerto Rico's current healthcare crisis, and the institutional and ideological pathways preceding its development, underscore how colonialism, sometimes directly and other times through the insidious cultural weight of colonial legacy, structures medicine in the Global South to both reflect Northern medical hegemony and promote the metropole's ongoing cultural, economic, and political dominance, rather than the well-being of periphery populations. My work illustrates the importance of incorporating Southern theory (Connell, 2007) into sociological study,

highlighting the incomplete nature of understanding moral economy through an exclusively Northern perspective. In addition, my findings expose the disproportionately harmful impact of global biomedical hegemony on the economically-strapped Global South, and complicate discussion of the relative successes and failures of neoliberal healthcare models, revealing how informal redistributive action contradictory to neoliberal philosophy can underlie neoliberal medical systems.

Southern Moral Economy

Moral economy is a useful theoretical tool in part because the opportunity for nuance and the prospect of intersectionality are built into its premise. Viviana Zelizer's (2005; 2012) conceptualization of "relational packages" and "relational work" asks scholars to think about the diverse nature of social ties and subsequent meaning-making around economic activity, and stresses that each piece of an economic interaction is infused with social context, cultural specificity, and varying degrees of individual agency. Through this theoretical framework, Zelizer leaves room for the complex power relations and diverse understandings that accompany gender, race, class, and other social categories, and invites discussion of moral economy variation across time, place and societies.

Scholars like Livne (2019) and Reich (2014) building on Zelizer's work in the healthcare sphere have made use of the subtle distinctions encouraged by moral economy concepts to explore how the neoliberal commodification of health in the United States has complicated moral economy negotiations for healthcare practitioners. Their work emphasizes that contradictions between social values and market realities are context-specific at both the meso-levels and micro-levels. In particular, Reich (2014) highlights that the foundational moral orientations of healthcare institutions are impacted by the social, political and economic realities under which

they develop, and that the way that modern-day healthcare providers understand, respond to, and moralize their responses to the "bad matches" between profit-oriented markets and medical values are constrained by institutional rules and shaped by the continued salience of early institutional social values. The ideological through-line and institutional specificity established by Reich complicates discussions of moral economy around present-day medical actors, adding an additional level of analysis to understanding the factors shaping moral economy interactions. However, like most scholars making use of Zelizer's concepts, Reich's nuanced, socially-grounded, historically-situated exploration remains centralized on a mainland United States, Globally Northern experience. Reich's research takes place in the metropole of American medical hegemony, in a medical context widely acknowledged as the axis around which global medical doctrine revolves (Beeson & Bell, 2009; Holst, 2020; Salter, Zhou, & Datta, 2015).

Outlining the progression of moral economy within Puerto Rican medicine, which developed and continues to operate under colonial rule and remains subject to the hegemonic influence of American biomedicine, reemphasizes the importance of institutional history and present-day institutional constraints on moral economy considerations, but also complicates the discussion of "bad matches" and "imperfect" solutions within the medical sphere. The history of medicine in Puerto Rico is not simply a history of professional interests, or state power, or technological advancement, but a chronicle of systemic colonial domination through the medical arena. The medical values encouraged by medical development and professionalization under Spain and the United States were not intended, as Starr (1982) asserts was the case in the U.S., to solidify Puerto Rican physicians' monopoly over medical knowledge, or as a benevolent benefit for native patients. Instead, each underlying medical value in Puerto Rico, from the progressive belief in the state's responsibility to guarantee healthcare access, to the idealization of

biomedicine over sociomedical principles, to the nationalistic interpretation of medical service, stemmed from the imperialistic aims of ruling colonial regimes. As a result, in Puerto Rico and other colonial territories with similar "subaltern" conditions (Subervi-Vélez, Rodríguez-Cotto & Lugo-Ocando, 2020), foundational moral frameworks contain inherent contradictions absent from medical values in the Global North. The internal logic of medical morals in the Global South is based not on local conditions and local interests, but on colonial conditions, such as the physical safety of metropole invaders, and colonial interests, such as the viability of imperially-advantageous economic endeavors. Moreover, it is not simply periphery medical values that encapsulate colonial contradictions, but the entire basis of periphery medicine and periphery medical professions. In Puerto Rico, medical development and professionalization occurred under the shadow of American medical hegemony, through the United States' desire to use medicine as a colonial tool, informed by a U.S. understanding of island inhabitants as racially inferior and intellectually stunted. These colonial conditions bled into the construction of Puerto Rican medicine and Puerto Rican medical professionals as both inferior to and dependent on, in a real, institutionalized sense through the subsummation of the AMPR to the AMA and the relegation of Puerto Rican physicians to subordinate positions within Puerto Rican medical institutions, medicine in the United States.

Of course, medical development in the periphery is not completely devoid of native input. Reich's accentuation of the impact of social context on foundational medical values remains true, and local conditions, interests, and culture are part and parcel of Southern social environments. In Puerto Rico, native physicians were central, if subordinate, players in the expansion of biomedical care on the island and subsequent colonial monitoring of local populations, and utilized American-style biomedicine to advocate for the Puerto Rican medical

profession and the islands' political autonomy from the U.S. regime. However, as shown in Puerto Rico, colonial dominance of the Global South situates these local efforts beneath imperial aims, mollifying their impact and diffusing their ability to improve the compatibility of local realities with medical development.

In keeping with Reich's emphasis on the continued impact of foundational medical values throughout subsequent institutional progression, the early ideological contradictions encapsulated in periphery medicine have reverberating effects. In Puerto Rico, this can be seen in the island's post-Commonwealth struggle to design a medical system that successfully integrated government-sponsored, universally accessible, costly, American-style biomedical healthcare within market limitations, and in the repeated clashing of native doctors with attempts to limit their professional autonomy and biomedical access through economical, sociomedical approaches to care. In addition to highlighting the practical complications of contradictory medical values, Puerto Rico's repeated failure to design a healthcare system that sustainably responded to local conditions illustrates how the moral economy tensions around provision of care and economic efficiency confronted by every country are distorted by the colonial context of the Global South. On the periphery, colonial influence weakens local economies, leading to higher levels of poverty and increased medical need, limits political autonomy and institutional pathways for designing healthcare policy, and subjects local culture to undue metropole influence. Colonialism in the Global South exacerbates moral economy conflicts and cements the impossibility of moral economy resolutions within the medical sphere, especially when considering the global hegemony of expensive biomedical healthcare and profit-oriented, neoliberal healthcare models ill-suited for colonially-crippled periphery economic contexts.

Many scholars have noted the that the neoliberal commodification of healthcare presents challenges to medical workers seeking to balance their social values with the market drive for economic efficiency (Healy, 2006; Livne, 2019; Reich, 2014). However, the contradictory medical ideals and unsustainable healthcare contexts resulting from the Global South's economic and political subjugation to the metropole intensify the "bad matches" confronting periphery doctors, and complicate the "relational packages" they construct in response. Puerto Rican physicians' professional identity narratives show doctors aligning themselves with American medical credentials while conscientiously distinguishing and elevating their island-centric, innovative abilities with respect to their inflexible American counterparts. These self-concepts emphasize that, because colonial medical contexts situate periphery physicians precariously between the stigmatized, resource-poor Global South and the prestigious, resource-rich Global North, Southern doctors' must balance their personal and professional connections to their native communities and their dependence on the metropole for legitimacy and status.

It is with an eye to this multitude of colonial considerations, including the in-betweeness of their professional status and personal ties, the medical and economic hardships besieging their native communities and complicating native medical care, and the inherent contradictions within their colonially-influenced medical values, that periphery physicians construct a moralized economy through which to approach and make sense of their professional lives. As the divergent responses of Puerto Rican physicians on and off the island reveal, periphery doctors' differentially balance these elements depending on their respective medical markets and social contexts. However, both Southern and Northern-based doctors remain loyal to a hegemonic, biomedical approach to moral economy problems, even as they actively participate in collective, community-centered responses to improving the health of their homelands.

Finally, the moral economy story of medicine in Puerto Rico, including the persistent unviability of expensive biomedicine within the island's market limitations, the explicit recognition by physicians of the connection between Puerto Rican patients' social problems and medical conditions, and providers' community-centric "relational work," imply that to understand the moral economy of medicine in the Global South is to understand what could have been, and perhaps what should have been. The colonization of medical values in the periphery leads to healthcare ideologies centered around expensive biomedicine and for-profit healthcare ill-suited to the local conditions of poverty, the persistence of economic stagnation, and the subsequent lack of medical resources that characterize healthcare in the Global South. A less technology-dependent, more community-centered, sociomedical approach to care that provides for patients' basic medical needs would be more appropriate. However, the historical legacy of colonization and present-day colonial forces have pushed the Global South away from formally adopting this kind of locally-responsive healthcare doctrine. Current theorizations of moral economy are a useful starting point for understanding these colonial nuances, but as Connell (2006) notes, Northern-centric theories like moral economy constitute an "erasure" (p. 213) of Southern experiences, and we as sociologists must move forward to undo this erasure by centering the experiences of the Global South within our work.

Biomedical Hegemony in the Global South

Wendland (2010) notes that there are two stories of biomedicine in the Global South, one of salvation, wherein biomedical tools and technology are a Western humanitarian force that improves the lives of people on the periphery, and one of oppression, wherein biomedicine's ties to Western cultural imperialism and Western-dominated institutions make it a tool of colonial control. Medicine in Puerto Rico includes a bit of both of these stories. Native doctors repeatedly

described helping their communities through biomedical means, successfully utilizing biomedical technology to improve the health of their patients. As Fadiman (1997) reminds us in her exploration of the intersection between culture, medicine, and health, "Western medicine saves lives" (p. 276). At the same time, biomedicine on the island has also functioned as a mechanism for imperial domination. The purposeful undermining of a sociomedical approach to health during the Hookworm Campaign to increase U.S. control over local populations and avoid financially supporting the broader well-being of island inhabitants, the subsequent dependence of island-based medical education and medical practice on American biomedical standards for legitimacy, and the consequent enabling of medical brain-drain as island physicians moved to the United States all illustrate how Northern biomedical hegemony strengthens and reifies unequal and exploitative colonial relationships.

My findings in Puerto Rico add nuance to these two biomedical stories, and to the mantra of biomedical supremacy that has infiltrated medical practice on a global level. Biomedicine does save lives. However, it is also costly, and is often enacted at the expense of sociomedical considerations. The problem with relying on Northern-style biomedicine is not simply, as Farmer (1999) implies, that "there isn't enough of it to go around" (p. 14). Biomedicine's penchant for decentering the relationship between social problems and medical conditions obscures a comprehensive understanding of health. Because of this, it is an inappropriate healthcare model through which to meet the needs of economically-vulnerable populations, Northern or Southern, more likely to confront social factors that negatively impact their health outcomes and experiences. Moreover, as the case of Puerto Rico illustrates, the influence of biomedical hegemony in the Global South warps not only the effectiveness of individual clinical encounters, but also the suitability of systemic responses to local healthcare conditions. Periphery healthcare

systems that prioritize biomedicine can over-tax healthcare resources, decrease medical access, and undermine the ability of periphery countries to provide for even the basic healthcare needs of their large indigent populations.

The case of Puerto Rico also shows how the hegemonic nature of biomedical culture, and the relationship between biomedicine and colonialism, make it difficult for the Global South, whose entire medical field has been constructed through colonialism as inferior, to resist the pull of "quality" and prestige that a Northern-style biomedical approach to health presents. Importantly, this ideological pressure is supported by material colonial systems. For example, during the COVID-19 pandemic, global patterns of response were governed by the World Health organization's COVID-19 Vaccines Global Access (COVAX) group. But many noted that COVAX itself was governed by representatives from the Global North, and that the exclusive inclusion of Northern pharmaceutical industries in COVAX planning reified existing systems centralizing medical intellect and technology in the metropole. Many of COVAX's suggestions, including the scaling up of medical equipment, the repurposing of critical-care facilities, and the expansion of COVID-19 testing, were myopically biomedical in nature, and ill-suited for a Southern context where the requisite resources were unavailable and the expense of implementation was unsustainable (Atuire & Bull, 2022; Karan & Khan, 2020; Sachez-Flores, 2022). Karan and Khan (2020) observe that the Global South struggled to afford many of COVAX's biomedical suggestions in part because of long-standing World Bank and International Monetary Fund (IMF) pressure on periphery governments to divest from preventative health and nutrition through neoliberal "structural adjustment grants" that overwhelmingly benefited Northern-based private industry (Shah, 2013). In Puerto Rico, similar systemic obstacles to resisting biomedical hegemony can be seen in the formal subsummation of

island medical training and practice to medicine in the United States, and in direct U.S. control over the islands' political and economic arenas, which necessitates that healthcare in Puerto Rico align with United States policies like Medicaid and Medicare that facilitate the mainland's biomedical culture. Not only is biomedical hegemony more broadly destructive in the resource-poor, economically-strapped Global South, enduring ideological and material colonial control over economic and healthcare policy in the periphery limits its ability to reject Northern-style biomedicine in favor of sociomedical healthcare models that might better meet the medical needs of Southern populations.

Reframing Neoliberal Healthcare

The case of Puerto Rico illustrates that the continued cultural influence of the metropole, bolstered by ongoing economic and political ties between the Global North and South, encourages not only biomedical hegemony, but also the application Northern-style neoliberal healthcare to periphery medical systems. The island's adoption of Reforma and implementation of a private, for-profit, managed care approach to health was preceded by decades of systemic pressure from undemocratically implemented federal policies that encouraged privatization and "free choice" in healthcare. Furthermore, Puerto Rico's neoliberal reforms were supported by the cultural influence of the United States and the desire of pro-statehood Puerto Rican politicians to court U.S. acceptance (Mulligan, 2014).

Discussions around the impact of neoliberal healthcare provision often focus on the way that for-profit privatization increases healthcare costs through administrative and profit expenses, promotes an individualistic free-choice approach to healthcare provision that undermines broader public health initiatives, and ultimately decreases healthcare access among the poor and disabled (Sakellariou & Rotarou, 2017; Schrecker & Bambra, 2015, Patouillard et al., 2007). As

exemplified in Puerto Rico, these effects are intensified in the Global South, where added bureaucratic and revenue expenditures are unsustainable and questions of healthcare inequality can more clearly be appreciated on a global scale, as local moves toward neoliberalism of healthcare downgrade the health outcomes and medical access of entire periphery populations. Although Reforma has negatively impacted the health of Puerto Rico's medically indigent through capitation and medical rationing, it has also threatened healthcare on the island more broadly as medical specialists migrate to the United States, hospitals previously utilized for medical training are privatized, and corresponding residencies are closed. The expansive negative consequences of local neoliberal healthcare reforms in the Global South make imperialistic pressure to privatize periphery healthcare systems all the more problematic, and exemplify how the spread neoliberalism contributes to global systems of inequality and colonial domination (Hartmann, 2016; Rushton & Williams, 2012; Tseris, 2017).

At the same time, the narratives of physicians in Puerto Rico, who respond to neoliberal fallout through informal, community-supported redistribution of medical resources in ways that represent both an ideological and material rebuke of neoliberal ideology, complicate discussion around the relative successes and failures of neoliberalism in healthcare. The necessity of informal redistribution in Puerto Rico is an indictment of the business-like efficiency and resulting improvement in healthcare access expected by proponents of neoliberalism. Moreover, the actions of Puerto Rican doctors remind us that intended systemic functions often diverge from on-the-ground realities, muddying our understanding of the effectiveness of neoliberal healthcare reforms. Northern countries like the United States are better-equipped to take on the added administrative and profit-oriented costs associated with neoliberal healthcare policies and managed care because they operate within a more affluent medical arena. However, that

neoliberal healthcare systems are more sustainable in the Global North does not negate how these systems might be bolstered by community support. Better understanding the ways in which neoliberal healthcare policies are dependent on informal redistribution and the collective actions of everyday people provides a more authentic picture of how neoliberal ideology fits into the reality of healthcare encounters, and provides insight into how medical systems might be changed to better match community needs and existing community practices.

Puerto Rico

This research has a number of implications for the future of healthcare in Puerto Rico. At an insular level, the way in which Puerto Rico's medical community actively rebuffs the neoliberal medical market through reallocation of resources suggests that healthcare on the island would benefit from a comprehensive reform, perhaps in the vein of eliminating profit from the insurance market through public administration of healthcare coverage, or through the creation of private, non-profit entities through which to insure the medically indigent. Should such broad-scale change prove impossible, an end to capitation and increased oversight and regulation of Reforma insurance practices could help mitigate existing issues with medical access and medical rationing. While these reforms would not completely resolve native doctors' frustration with low salaries and lack of access to biomedicine with comparison to their U.S. counterparts, they would alleviate some of physicians' moral economy tension and, in the case of a system overhaul, eliminate the increased administrative and profit costs associated with neoliberal healthcare administration.

My findings also indicate that Puerto Rico would be better-served by reforming its healthcare policies to formally incorporate the community-centered practices of its doctors and everyday citizens. This could take the form of greater investment in community healthcare

centers employing community members in administrative and non-biomedical care-taking roles, the formalization of monetary redistribution between affluent and indigent patients already practiced by island doctors, and/or the creation of proper infrastructure and incentives to facilitate technological and labor exchange between the private and public healthcare arenas. In effect, the healthcare system in Puerto Rico could be redesigned to better integrate redistributive sociomedical practices already supported by even the most biomedically-zealous native doctors. Moreover, physicians' narratives acknowledging the connection between Puerto Rico's economic and medical crises and patients' social and healthcare needs lend credence to the importance of instituting sociomedical reforms outside of the medical sphere. Healthcare on the island would be greatly improved by finding ways to equitably strengthen the economy, provide greater financial support for indigent populations, and improve access to safe housing and quality nutrition.

At the same time, I struggle to make suggestions for improvements at an insular level because, as always, the specter of colonialism looms unendingly over every facet of life on the island. The commonwealth government's ability to institute any kind of sociomedically-linked reform is limited by federally mandated PROMESA austerity measures that obligate cuts to public services. Healthcare policy in Puerto Rico must abide by federal regulations, often unequally applied and under-funded with comparison to U.S. states, that the island has no democratic power in shaping. Insular healthcare reforms must be financially supported by a tax base beset by a colonially-weakened economy, and affluent Puerto Ricans, including physicians, can easily access better occupational and educational opportunities in the United States. Healthcare practice and medical training on the island is dependent on U.S. medicine, and must align with American medical standards that are more likely to prioritize expensive technology

and biomedical treatment. More broadly, healthcare in Puerto Rico must grapple with consequences of cultural colonization, including a contradictory medical value system that simultaneously supports biomedical superiority and government responsibility for ensuring universal healthcare access and susceptibility to American ideas about the advantages of neoliberal healthcare provision. Furthermore, even if Puerto Rico is able to institute healthcare reforms, is able to find funding for sociomedical programs, is able to improve healthcare conditions and convince native doctors to stay, there is always the possibility that some future federal policy might undermine the island's actions. Who could forget how Medicare and Medicaid, two of the most lauded public healthcare policies in the history of the United States, proved catastrophic to the island's healthcare future during the Regional Era?

I make no claims as to whether Puerto Rico's future should include statehood, independence, or the continuation of some in-between status. Each of these possibilities comes with questions and consequences that I am in no position to answer or cast judgement on. Statehood could mean the loss of an independent cultural identity; independence would subject the island fully to global colonialism and could disrupt cross-Caribbean relationships; the current in-between status has clearly been accompanied many serious drawbacks. However, based on this research, what I do believe is that if Puerto Rico is to remain politically tied to the United States, it needs to be given parity with its mainland counterparts. This means equal federal funding, and equal representation within the federal government. As Dra. Mejía explained, "The United States picked us! And we demand our full citizenship."

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