Boston College

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Health Care Access and Service Utilization among Immigrants in California: Assessing the Influence of Status, Racialization, & Policy Reform

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Abstract

The United States is home to over 44 million immigrants, giving it the largest foreign-born population in the world, a number which is projected to roughly double by 2065. Among foreign-born individuals, significant disparities have been uncovered in health care utilization compared to their U.S.-born peers. A growing body of research has recognized the need to assess the institutional and systemic barriers to health care access contributing to this disparity, and how those barriers may be effectively mitigated.

My investigation of this topic was based in California and consisted of two analytic components. The first was a quantitative assessment of barriers to health care access and how those barriers were uniquely experienced by subgroups of participants. Utilizing data from the 2015-2019 California Health Interview Survey data collection cycles, latent class analysis was used to investigate unique patterns of barrier endorsement based on participant immigration status, race or ethnicity, and the interaction between the two. Three distinct classes were identified with a low-, moderate-, and high-risk of endorsing multiple barriers to health care access. The hypotheses that legal status, race or ethnicity, and the interaction between the two were partially supported.

The second component of this study was a critical policy analysis of California's SB 54, a package of legislation which aimed to foster trust in public institutions and increase use of health care by limiting the ability of local law enforcement to act on behalf of federal immigration authorities. This analysis determined that county-level implementation was inconsistent, and those differences were associated with mixed success in decreasing immigration contact and increasing service utilization. These findings are leveraged to identify policy and programmatic recommendations that may improve delivery and facilitate increased ability to safely seek high-quality care for medically underserved populations.

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Chapter 1. Introduction

The United States is home to over 44 million immigrants, giving it the largest foreign-born population in the world. This number is projected to roughly double by 2065 [1]. Among foreign-born individuals, significant disparities have been uncovered in health care utilization compared to their U.S.-born peers [2]. These disparities have been attributed by some, particularly in earlier literature, to personal characteristics, health needs, and behaviors [3]. However, individuals who have immigrated to the U.S. face a number of institutional and structural barriers to accessing quality health care services, including lack of health insurance coverage, over-concentration in low-wage jobs that do not provide benefits, and low cultural competence among providers [2; 4-6].

Health care policies directly limiting coverage eligibility, and punitive immigration policies that impact individuals' belief in their ability to safely participate in programs and with providers, further constrain access [6, 7]. These factors contribute to substantial disparities in service utilization, with immigrants significantly less likely to seek formal health care services compared to their U.S.-born peers, even after controlling for individual health needs [8; 9]. Of course, immigrants are not a monolithic group, and thus many sub-group and individual differences can be expected, but broadly there has been an observed underuse of routine, preventative care, and an overdependence on emergency services, which have serious negative consequences for long-term health [2, 10].

Less is known, however, about which sub-groups of non-citizens are most heavily impacted by this disparity. Research on the health care experiences of undocumented immigrants in particular often relies on estimates rather than direct responses due to privacy concerns and the fear that participation will lead to detection by immigration authorities [11]. Furthermore, evidence suggests that the protections granted to and restrictions placed on individuals based on their immigration status are differentially applied depending on co-occurring social categorizations, such as race, ethnicity, or country of origin [12].

Attaining health equity is the goal of multiple national and international campaigns conducted by organizations like the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC). On World Health Day 2021, in light of the devastating effect of COVID-19 on communities and health care systems around the globe, the WHO challenged countries to address the fundamental causes of health inequities and to implement sustainable solutions [13]. Some state governments in the U.S., such as those of California and Washington, are increasingly focused on raising awareness and providing health insurance coverage options for their undocumented populations [14]. Despite the benefits of such measures, a more nuanced understanding of the web of barriers to care individuals face along the documentation spectrum could lead to more holistic policy-level interventions.

Considering existing disparities, and with the number of immigrants in the United States increasing annually, it is critical that we understand the underlying mechanisms contributing to health disparities among foreign-born populations in order to create more inclusive programs and policies. The purpose of this dissertation is to investigate institutional- and policy-level barriers to health care access for immigrants at the intersection of status and race or ethnicity.

Chapter 2. Background

The concept of access as it relates to health care has its origins in public policy [15], and its operationalization has been the subject of debate over the past few decades. Many studies have relied on unidimensional measurements of access, typically whether or not an individual has health insurance coverage [16, 17], or a usual source of care [8, 18], both of which have been linked with higher rates of service utilization. In addition to an emphasis on insurance coverage, much of the prior research on utilization has focused on the role of individual characteristics and behaviors in treatment-seeking and health outcomes. Studies simply connecting personal characteristics like race or ethnicity with worse health outcomes - without delving into the institutional and structural factors driving those inequities - have, in many cases, been used in arguments around biological determinism, racial essentialism, or to justify interventions to ‘educate’ groups on the importance of medical care [19].

More recent and critical perspectives are shifting away from an individual deficit narrative in which inherent identity or behavioral factors drive health disparities and focusing instead on scrutinizing macro-level barriers to care [20], what equity scholar Dr. Kira Banks has referred to as the “built landscape” [21]. In other words, we should frame the implications of our studies more on what have been defined as ‘mutable’- created and changeable - factors, such as policies and practices, rather than on ‘immutable’ factors, or personal characteristics [22]. This growing body of research has recognized the need to disaggregate the concept of access into more nuanced and systemically-focused dimensions in order to better capture barriers to service seeking and, in turn, to identify more effective approaches to mitigate them.

A Brief History of U.S. Health Insurance

Health insurance coverage as a proxy of access is still widely popular among legislators [16], a simplification which has defined the health policy landscape in the United States for the majority of the twentieth and twenty-first centuries [23]. This emphasis on insurance is likely due, at least in part, to the enduring political conflict between private and public coverage options that started over a hundred years ago.

Basic medical benefits in the form of industrial sickness funds arose in the U.S. as early as the Civil War, but the broader topic of health insurance first became a national talking point during the Roosevelt Administration at the turn of the twentieth century [24]. The Progressive Era saw the development of workers' compensation insurance, and individual hospital service plans followed during World War I and the Great Depression when it became increasingly difficult for individuals and families to afford care. Records from several Texas cities found that between 1929-1930, charity medical care participation rose 400%. In response, Baylor University Hospital enrolled public school teachers in a pilot insurance plan that covered 21 days of hospital care for 50 cents per month. This hospital service plan spread and evolved, ultimately becoming the Blue Cross and Blue Shield Associations [23].

Proposals for a public national health insurance program continued to be highly contentious, both among policymakers and physicians, especially as the private health insurance industry grew in the 1940s and 50s. Though first proposed in 1951, it was not until the early 60s that what we now know as Medicare gained national attention and an endorsement from President John F. Kennedy [25]. His successor, President Johnson, signed the Social Security Amendments [26] into law in 1965, expanding existing federal support for low-income families and establishing Medicaid [27]. The SSA also built on earlier legislation to create Medicare, its principal benefit being hospital care for adults aged 65 and older [25].

Modern policymakers' attempts to modify the health care system in the United States have continued to focus heavily on increasing insurance coverage and, to a lesser extent, the adequacy of that coverage, efforts which culminated in arguably the most significant package of health care legislation since the 1960s, the 2010 Affordable Care Act (ACA). The Patient Protection and Affordable Care Act [28] was signed into law by President Obama on March 23, 2010. Of its many provisions, two of the most notable were the expansion of Medicaid and the establishment of the health insurance exchange. Enacted in 2014 after a series of legal challenges, the ACA allowed lawfully present residents with incomes up to 400% of the Federal Poverty Line (FPL) to purchase subsidized health insurance on the exchange [29]. It also aimed to reform and, to a certain extent, standardize Medicaid coverage across the country [30]. Under the new policy, 'able-bodied' adults earning at or less than 138% of the FPL became eligible for coverage. Prior to expansion, Medicaid was only available to households with dependent children and states retained flexibility in determining their own income and asset thresholds [29].

Despite increased federal funding opportunities tied to expansion, several states filed legal challenges against the ACA. Under the Supreme Court ruling in *National Federation of Independent Business v. Sebelius* [31] mandatory expansion was deemed unconstitutional, and states were granted the ability to opt-in or -out of expanding their Medicaid programs. As of 2023, 40 states and the District of Columbia have expanded Medicaid to or beyond the federal guidelines established through the ACA (29). Medicaid is now the single largest public health insurer in the country, covering approximately 88 million people [32].

Although coverage gaps persist between those with low enough incomes to qualify for Medicaid and those with high enough incomes to afford subsidized insurance on the marketplace, approximately 92% of the U.S. population has some form of health insurance [33]. Despite nearly ubiquitous coverage, significant disparities in service utilization and health outcomes persist, providing evidence that insurance coverage in and of itself does not fully explain one's ability to seek care. Early research on the subject of access found that failing to examine multiple aspects of accessibility could lead to an over-estimation of the salience of certain barriers [34]. Looking beyond insurance coverage, several distinct but interlinking factors that have been identified in the literature include affordability, spatial access, availability, and administrative burden.

Expanding the Definition of Access

The affordability of health care services poses another major barrier to utilization. Findings from the 2022 National Health Interview Survey indicated 28% of adults delayed or did not get needed medical care due to cost. When asked about themselves or family members in their household, that rose to 43% [35]. Cost is a particularly salient barrier for the uninsured. Polling conducted in 2022 by KFF found that 64% of uninsured adults cited prohibitively high cost as the main reason they lacked coverage and were roughly twice as likely to report difficulty affording services [36].

For many of those with insurance coverage, cost is a barrier to care as well. Health insurance coverage does not guarantee that care will be affordable, particularly within the fee-for-service model employed in the United States [37]. Even with employer-based health insurance, financial terms and coverage are often inadequate. High or ultra-high premiums and deductibles, uncovered prescriptions, and out-of-network specialists are just some of the factors making out-of-pocket costs unmanageable for insured individuals [16, 38]. Between 43-57% of insured participants in the 2023 Commonwealth Fund Health Care Affordability Survey reported it was somewhat or very difficult to afford health care, depending on their source of coverage, and over 30% reported currently paying off medical debt [39]. Another recent study revealed that collections agencies in the United States currently hold approximately $140 billion in unpaid medical debt, a substantial portion of which is owed by insured individuals [40]. Cost-driven delays lead to a number of negative outcomes, including worsening health problems and rationing or discontinuing prescription medications [39, 41].

Spatial or geographic access has been identified as a meaningful barrier to care as well [42, 43]. The distribution of healthcare infrastructure and resources is often geographically concentrated, leaving some communities medically isolated [44]. This is commonly linked to urbanicity, with “distance decay” leaving those in rural areas less able to seek care [43, 45]. However, individuals living in urban or peri-urban settings may also lack adequate personal or public transportation and specialty care tends to concentrate in higher-income areas [46]. It is estimated that approximately 3.6 million people in the US forgo medical care each year due to lack of transportation [47].

The level to which doctors’ offices and other medical facilities within geographic reach are available also plays a role [15]. Aspects of availability include how long in advance an appointment must be scheduled, whether hours of operation meet the needs of those working non-traditional hours, and whether new patients are accepted. Some states, such as California and Washington, require timely access to care. “Timely” is typically defined as occurring within 10 business days for a non-urgent primary care appointment and 15 business days for a non-urgent specialty appointment [48]. In reality, the national average for a new-patient appointment in 2022 was 26 days, an 8% increase since 2017 and 24% increase since 2004 [49].

New patient acceptance rates, while high overall, are often predicated on insurance coverage. Private insurance plans pay providers 143% more on average than Medicare, providing financial incentive to prioritize privately insured patients [50]. Furthermore, many primary care providers do not offer appointments outside of traditional working hours, making care more difficult to access for those without leave [51]. A 2009 survey found that only 29% of surveyed U.S.-based doctors had after-hours care arrangements other than the emergency department [52]. Timely and convenient availability is crucial for prevention and early detection of disease [53].

The level of administrative burden in care seeking has been identified as a salient barrier to health service use as well. Administrative burden is defined as challenges to participation either intentionally or unintentionally imposed by institutions [54]. Medicaid, for example, is considered a relatively high burden program, particularly in states that did not expand under the ACA. For prospective beneficiaries, extensive documentation requirements, asset tests, and arduous renewal processes contribute to a lack of take-up [55]. For physicians, burdensome paperwork and billing hurdles lead many to avoid accepting Medicaid. A recent study found that providers lose reimbursement on roughly 17% of Medicaid claims due to billing issues, compared with just around 5% and 3% for Medicare and private insurance claims, respectively [56]. Though ranging widely throughout the U.S., in some states as few as 39% of physicians accept new Medicaid patients [57] and ultimately only approximately 50-70% of those eligible for Medicaid enroll in the program [54].

Administrative burdens fall into three categories: compliance costs, psychological costs, and learning costs. Compliance costs are the material costs involved in interacting with institutions, such as money and time. Psychological costs refer to mental stressors arising from interacting with institutions, such as stigma resulting from participation in welfare programs. Finally, learning costs refer to time spent gathering needed information. These burdens, it is argued, impact groups with fewer resources more heavily and in turn reinforce structural inequalities. Failure to participate, therefore, should not be viewed as solely a function of individual choice, but a reflection of the social and financial capital needed to successfully navigate the system [54].

Disparities in Health Care Access for Immigrants

Though these barriers to health care access may be experienced by anyone, evidence suggests that they are not experienced proportionately by all. Due to social determinants such as racism, sexism, and poor labor conditions, some sub-populations experience additional difficulty navigating the health care system. Foreign-born individuals may be vulnerable to inequitable access to care, particularly those with less secure statuses. Both undocumented and lawfully present immigrants are significantly less likely to have health insurance than U.S. citizens and hold one of the highest uninsured rates in the non-elderly population [6, 10]. Undocumented individuals fare the worst, being significantly less likely to have coverage than both those born in the U.S. and documented immigrants, and are prohibited from purchasing health insurance coverage through the ACA marketplace [6, 58]. On average, undocumented individuals who do have private insurance pay higher premiums that commonly exceed their expenditures [59].

Immigrants may also experience barriers unique to their status, such as a dearth of non-English medical resources and risk of contact with immigration authorities [60]. Language barriers pose a unique challenge to service use. Inability for practitioners and patients to adequately communicate can have serious negative health consequences and is associated with lower-quality care [18]. An individual categorized as having limited English proficiency is over the age of five and self-reports their ability to speak English anything less than ‘very well’ [61]. Legislation has been in place since the 1964 Civil Rights Act [62] to provide resources to those with limited English proficiency [63], but these provisions were made much more explicit in the ACA.

Under the Plain Language Requirement (Section 1331) and the Culturally and Linguistically Appropriate Requirement (Section 1001), patient communication from both providers and insurance companies was required to be understandable to the “average” audience [28]. This granted the right to oral interpretation and written translations in counties where 10% or more of residents spoke the same non-English language [64]. In practice, however, this policy only encompassed a fraction of US counties, leaving many patients to rely on friends and family to translate sensitive or complicated medical information [65, 66].

Lack of English proficiency, accent, and perceived race or ethnicity combined are associated with experiences of medical discrimination among immigrants. A recent survey of foreign-born adults in the US found that 25% reported unfair treatment from a health care provider and 29% had difficulty obtaining courteous and culturally competent care. Black, Latinx, and Asian immigrants were significantly more likely to endorse these experiences than their white immigrant counterparts [67]. Negative personal experiences or those of loved ones has led many to avoid formal health care facilities for fear of being turned away by providers, receiving low-quality care, or even being criminalized [68].

Fear of status disclosure to immigration enforcement can have significant effects on service use, program enrollment, and overall physical and mental health. A study on Medicaid/CHIP uptake among undocumented mothers with U.S. citizen children, for example, found that for every point increase in risk of deportation, there was an 87% decrease in the likelihood of program enrollment [69]. Additionally, enforcement-related concerns have been identified as a leading cause of failing to enroll or maintain SNAP, WIC, and TANF benefits, all of which have additional implications for family well-being [6, 70]. This “chilling effect” has become more pronounced as rights and resources have been restricted and anti-immigration rhetoric has intensified [6].

The Role of the Policy Environment

The state and federal policy landscape plays a key role in the reinforcement or mitigation of these fears and subsequent health disparities. Health policies considerably shape options for seeking care [6]. However, health and well-being are not only influenced by changes in health policy. The WHO’s Health in All Policies Approach encourages us to consider the potential health ramifications of non-health related policies as well [71]. This link has commonly been made for economic and social policies, but less so for integration and immigration policies [72].

Non-health related integration policies either restrict or increase the availability of resources needed for individuals to participate in the health care system [6]. These policies may include easing the ability to engage in higher education or employment, or providing access to documents like drivers' licenses. A U.S.-based study of undocumented women born in Africa, for example, cited lack of any government issued ID as a key factor in participants' decision to delay or forego health care, even with long-term symptoms or chronic conditions requiring regular visits. Lack of regular care led to concerning trends in self-diagnosis, self-medicating, and relying on non-medical sources of information [38].

Immigration policies have a huge ability to influence health and care-seeking. In recent years the discursive gap between extreme rhetoric and policy implementation has decreased, leading to policies with severe consequences for the safety and well-being of immigrants in this country [73], but this situation is not a novel one. Since the late 1800s, immigration has been an area of chronic political conflict in the United States, particularly for a country with an origin myth so inextricably entwined with the idea of immigration as both positive and necessary.

Federal legislation regarding immigration dates back to 1876, when the U.S. Supreme Court held that the federal government, not the states, is responsible for immigration policies and control. Soon after, the first of many restrictive immigration laws targeting individuals deemed 'less desirable', the Chinese Exclusion Act [74], was passed, which prohibited admitting additional Chinese labourers for a period of ten years [75]. The so-called 'Great Wave' of some 24 million immigrants entering the U.S. from 1900-1920 prompted Congress to pass legislation creating the national-origin quota system. This law limited the proportion of immigrants from any country based on that nationality's representation in the most recent U.S. Census and heavily favored immigration from Western Europe [75]. In 1954, the Immigration and Naturalization Service (INS) conducted the so-called "Operation Wetback" deporting over one million Mexican immigrants and U.S. citizens of Mexican descent [76].

Conversely, the 1980s saw a loosening of restrictions for agricultural workers and established special exceptions for refugees. The Immigration Reform and Control Act (IRCA)[77] of 1986 granted citizenship to nearly 3 million people [75]. However, in 1996 the Illegal Immigrant Reform and Immigrant Responsibility Act (IIRIRA)[78] was passed, which tightened border control, increased legal repercussions for unlawful immigration, and initiated construction of a border fence [76]. The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA)[79] was passed the same year, and redesignated immigrants as either "qualified" or "non-qualified" for the purposes of public benefit eligibility [6]. Since 1996, immigration policies have become increasingly punitive, focusing heavily on surveillance and limiting pathways to citizenship [80]. There has also been a dramatic increase in the frequency of legislation related to immigration, with an average of 350 laws and resolutions enacted at the state-level each year since 2007, some of which have granted additional rights and others that have restricted integration and expanded enforcement mechanisms [6, 7].

Despite scaling up controversial enforcement programs such as Secure Communities [81], President Obama passed the executive order Deferred Action for Childhood Arrivals (DACA) [82], which granted protection from deportations, work permits, and identity documentation for individuals who had been brought to the United States as children [75, 83].

Donald Trump ran on a much different platform four years later, promising to build a border wall between the United States and Mexico, to deport all undocumented immigrants, defund so-called sanctuary cities, and to triple the number of ICE agents [84]. The Trump Administration subsequently took over 400 punitive executive actions on immigration, including the controversial expansion of public charge, an admissibility determination based on the likelihood of a non-citizen becoming dependent on the state, to include Medicaid [85]. Even before this rule went into effect, studies identified increased avoidance of public medical programs in response [85-87]. Though children's participation in these noncash assistance programs remained exempt from consideration under the new public charge ruling, a nationally-representative survey found that roughly 29% of low-income immigrant households with children forewent needed noncash assistance due to concerns it would negatively impact their status [87].

This period of profound policy change, accompanied by intensifying nationalist and anti-immigrant rhetoric, has been quantitatively and qualitatively associated with a "chilling effect" on willingness to engage with health care providers, particularly for individuals with less secure legal statuses [29, 88]. In addition to the sole influence of immigration status, perceived race, ethnicity, or nationality plays a significant role in risk of contact with immigration authorities. In what has been termed the "deportation pipeline" approximately 70% of undocumented individuals in the U.S. are from Mexico, Guatemala, Honduras, and El Salvador, yet make up approximately 90% of detainments and deportations by Immigration and Customs Enforcement (ICE) [89, 90].

The Current Study

Research teasing apart these nuances, particularly with respect to the role of specific legal statuses, is limited. Data quality has played a key role in this gap, leading to certain assumptions about the root causes of decreased care seeking. The Immigrant Health Paradox, or Healthy Immigrant Effect, is a theory which attributes disparities in service use to individual-level factors. Health care utilization studies relying on this theory argue that one of the primary reasons for differences in service use among foreign- and native-born individuals is that immigrants are healthier when they arrive in the United States and thus do not need or do not believe that they need care [91]. This theory is often linked to the positive selection process, wherein countries screen for healthier and more highly educated immigrants [92]. While certainly true of certain status groups in the U.S., this argument does not take into account groups for which we have less representative data, such as the undocumented, refugees, and other temporary visa holders [93]. Researchers have argued that this reliance puts studies at risk of suffering from omitted-variable bias and limits our ability to adequately understand the unique health needs of these groups [94, 95].

Recent studies have pushed back against the Immigrant Health Paradox, citing that findings are often based on this low-quality data, with multiple systematic reviews finding no consistent evidence for better mental or physical health [92, 93]. In fact, preliminary evidence suggests that given access, services will be used. A recent RCT undertaken by the National Bureau of Economic Research provided 2,500 low-income, undocumented individuals not otherwise eligible for insurance coverage with access to primary care facilities over a 14-month period. The treatment group was given assistance in scheduling appointments and during the first three-month period of the program alone, 57% of treatment-group individuals visited a primary care center, compared with only 16% of those in the control group [96]. For patients determined to have average health risk, doctors' office visits increased by 14% and emergency room visits decreased by 21%. For those considered high risk, there was a 42% decrease in emergency room use. Furthermore, those receiving access to primary care also had significantly higher rates of screening for chronic conditions like diabetes and hypertension, which have been shown in previous studies to significantly reduce long-term mortality from cardiovascular disease [96].

Additionally, much of the research around disproportionate contact with immigration enforcement and health outcomes has focused on Latinx populations [89], but these disparities influence other racial and ethnic minority groups as well. A recent study conducted by the UCLA Center for Health Policy Research compared the experiences with law and immigration enforcement between Asian and Latinx individuals. Although Latinx respondents reported more frequent and varied contact with law and immigration enforcement, 10% of Asian respondents reported being racially profiled and 13% personally knew someone who had been deported [97]. Furthermore, this study was conducted prior to the COVID-19 outbreak, during which time anti-Asian rhetoric skyrocketed.

Most recently, increasing attention is being paid to the experiences of Black immigrants in the United States, who face both immigration-related interactions with law enforcement officers, as well as disproportionate contact with the carceral system [89]. Particularly following widely-televised incidents, such as the recent chasing of Haitian immigrants at the U.S.-Mexico border by Border Patrol agents on horseback, and lawsuits on the abusive treatment of Black immigrants in detainment facilities, including reports of medical neglect (98), it is critical that we assess the impact on the health behaviors and outcomes of varied and disaggregated racial and ethnic groups within the larger immigrant population.

This study will also attempt to provide a more holistic consideration of barriers and will take a variety of factors into consideration simultaneously rather than focusing on a specific aspect of access. This perspective will allow for an assessment of the combined influence of barriers within the sample, as well as how each compare to one another. Furthermore, this study will not rely on proxy variables, such as income and diagnosed conditions, to determine health needs and obstacles, but rather direct reports from participants on their difficulties navigating the system. Finally, this study will explicitly place the onus on institutional practices and policies, rather than individual characteristics. For example, many studies use participant income as a proxy of affordability. This study asks participants directly whether costs are too high, regardless of their income. This shifts the responsibility onto providers and insurers who are charging too much or who are providing inadequate coverage rather than focusing on income, which is more easily misinterpreted as the fault of the individual rather than the system.

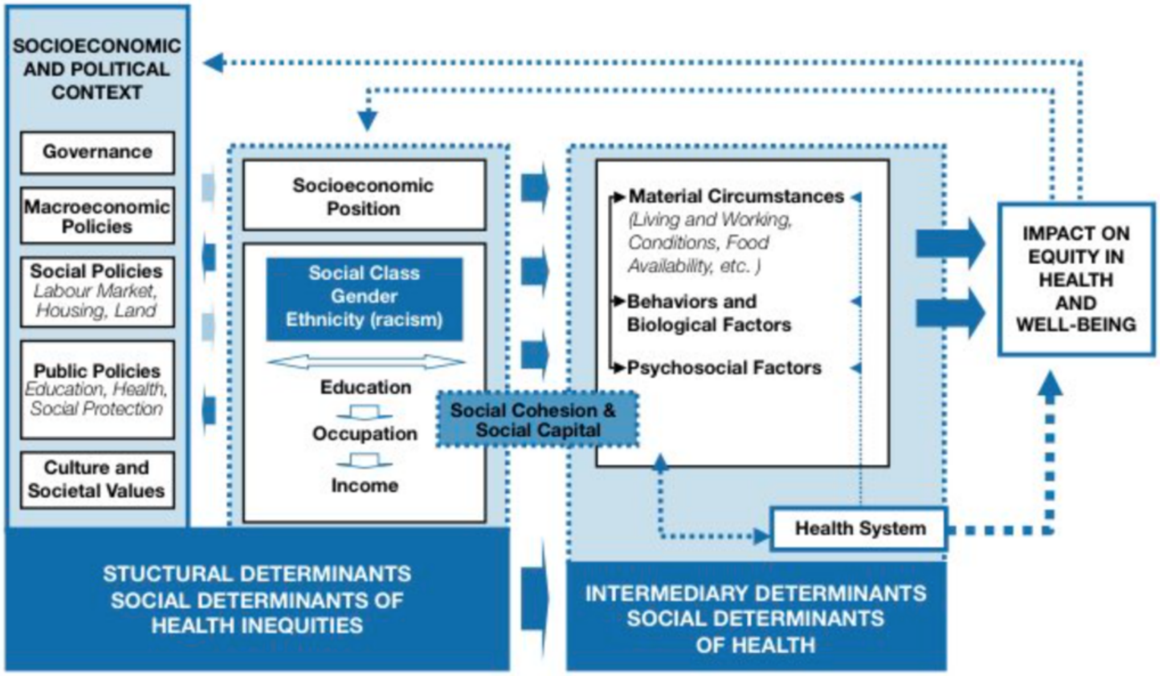
This topic will be investigated within the context of California and will take place in two parts: the first will assess whether patterns in reported barriers to care are predicted by immigration status, race or ethnicity, and the interaction between them using data from the California Health Interview Survey. The second will be a critical policy analysis of California's SB 54 (99), the California Values Act, and how attempts to limit federal immigration enforcement's collaboration with local law enforcement have influenced care seeking.

Chapter 3. Theoretical & Conceptual Frameworks

Several theoretical and conceptual frameworks have informed the development of this dissertation. Most broadly, the study is based on the World Health Organization's Social Determinants of Health framework (SDOH). In this conceptual framework, social, political, and economic forces, referred to as structure mechanisms, create stratified, hierarchical socioeconomic positions, which in turn shape the health outcomes of individuals and communities by determining their level of access to resources [100].

This framework is based in theories of power and argues that in order to make tangible progress in the effort to reduce health disparities, structural change will be required in our economic, social, and political institutions. Any action to reduce health disparities must engage the agency of communities, as well as the responsibility of governing bodies [100]. SDOH identifies policies as a key structural determinant of health because they shape other broad social determinants such as social and economic conditions [7].

Figure 1. WHO Social Determinants of Health **[**100]



The theoretical justification for analyzing the influence of immigration status and self-identified racial or ethnic group is grounded in Critical Race Theory (CRT). One of the primary characteristics of CRT is the concept of racialization. Racialization refers to social classifications based on seemingly race-neutral statuses that, through their inequitable application, disproportionately impact racial/ethnic minorities. Furthermore, once certain statuses become associated with specific racial/ethnic groups, the negative consequences of those perceptions can spill over to individuals within that group, regardless of their own legal status [12]. Within the context of immigration, this spillover has been termed “vicarious illegality” and has resulted in individuals being stopped, arrested, and even deported due to assumed legal status [6].

Historically, this dynamic has been discussed in policy areas such as criminal justice and welfare reform. For example, compared to other racial and ethnic groups, the media has overrepresented Black Americans in their depictions of those living in poverty and benefiting from welfare programs relative to their actual usage for decades [101]. This link has been strongly solidified in the public mind, with a recent poll finding that two-thirds of respondents inaccurately believe that most welfare recipients are Black [102].

This concept has only recently been applied to studies on immigration status and health disparities [12]. From the Chinese Exclusion Act of 1882 [74] to contemporary programs like the Migrant Protection Protocols [103], immigration policy has historically been, and continues to be, highly racialized. Communities typically associated with immigration continue to experience disproportionate surveillance and enforcement [90]. Though still emergent, available research argues that the influence of actual legal status and the restrictions that entails, combined with the racialization of that status depending on the individual's perceived racial or ethnic group, will uniquely influence access to health care and service utilization.

My investigation of the joint influence of immigration status and racial or ethnic identity on engagement with the health care system is grounded in a Public Health Critical Race (PHCR) framework. This framework is derived from Critical Race Theory (CRT) and was developed by Dr. Chandra Ford and Dr. Collins Airhihenbuwa in an attempt to facilitate the application of CRT to public health research. They argue that the study of racism as a factor within a Social Determinants of Health framework has not adequately incorporated the methodologies and legal orientation of CRT [104].

PHCR attempts to move the study of health beyond documenting inequities toward understanding and establishing methods of addressing the power hierarchies underlying them. In addition to incorporating key characteristics of CRT, PHCR also has ten principles. Several are of key importance to this study. The first is racialization, as discussed above. The second is structural determinism, or the fundamental role of macro-level factors in driving and sustaining inequities rather than individual or interpersonal factors. Finally, intersectionality, which considers the influence of co-occurring social categories, such as immigration status and race or ethnicity (104). A full description of each principle can be found in Table 1 below.

Table 1. Principles of PHCR [104]

Principle	**Definition**
Race consciousness	Deep awareness of one’s racial position; awareness of racial stratification processes operating in color blind contexts
Racialization	The fundamental contribution of racial stratification to societal problems
Race as a social construct	Significance that derives from social, political, and historical forces
Ordinariness of racism	Racism is embedded in the social fabric of society
Structural determinism	The fundamental role of macro-level forces in driving and sustaining inequities across time and contexts; the tendency of dominant groups and institutions to make decisions or take actions to preserve existing power hierarchies
Social construction of knowledge	The claim that established knowledge within a discipline can be re-evaluated using antiracism modes of analysis
Critical approaches	To dig beneath the surface; to develop a comprehensive understanding of one’s biases
Intersectionality	The interlocking nature of co-occurring social categories and the forms of social stratification that maintain them
Disciplinary self-critique	The systematic examination by members of a discipline of its intentions and impacts on the broader society
Voice	Prioritizing the perspectives and experiential knowledge of marginalized persons

Chapter 4.1. Methods
California Health Interview Survey

This study consists of two parts. The first is a quantitative assessment of barriers to health care access experienced by participants in California and how those endorsed barriers differ based on immigration status, self-reported race or ethnicity, and the interaction between the two characteristics.

Data Sources

Analyses for part one of this study relied on secondary data from the California Health Interview Survey (CHIS). This survey is conducted annually by the UCLA Center for Health Policy Research in conjunction with the California Department of Public Health and the Department of Health Care Services. Questions focus on a variety of indicators related to health and well-being (105). Ethical approval was granted by the Boston College Institutional Review Board to assess de-identified secondary data. The UCLA Center for Health Policy Research granted permission to use restricted CHIS data.

CHIS Sampling

CHIS sampling took place within both geographic strata and modelled strata. For geographic strata, a representative sample of the residential population of California was randomly drawn using a stratified address-based sampling frame from 44 geographic strata representing the state’s 58 counties. An additional 14 sub-strata were created within Los Angeles and San Diego, the state’s two most populous counties. Three of the 14 strata were created from groups of counties with small populations. A detailed list of the geographic areas composing each stratum and sub-stratum can be found in Table 2 below. Depending on county size, number of households sampled in each ranged from 200 – 4,000 per year. Addresses were taken from the U.S. Postal Service Delivery Sequence file [105].

Table 2. CHIS Geographic Sampling Strata

1. Los Angeles
    1.1 Antelope Valley
    1.2 San Fernando Valley
    1.3 San Gabriel Valley
    1.4 Metro
    1.5 West
    1.6 South
    1.7 East
    1.8 South Bay
2. San Diego
3. Orange
4. Santa Clara
5. San Bernardino
6. Riverside
7. Alameda
8. Sacramento
9. Contra Costa
10. Fresno
11. San Francisco
12. Ventura
13. San Mateo
14. Kern
15. San Joaquin
16. Sonoma
17. Stanislaus
18. Santa Barbara
19. Solano
20. Tulare
21. Santa Cruz
22. Marin
23. San Luis Obispo
24. Placer
25. Merced
26. Butte
27. Shasta
28. Yolo
29. El Dorado
30. Imperial
31. Napa
32. Kings
33. Madera
34. Monterey
35. Humboldt
36. Nevada
37. Mendocino
38. Sutter
39. Yuba
40. Lake
41. San Benito
42. Calusa, Glenn, Tehama
43. Del Norte, Lassen, Modoc, Plumas, Sierra, Siskiyou, Trinity
44. Amador, Alpine, Calveras, Inyo, Mariposa, Mono, Tuolumne

Modelled strata were used to obtain statistically stable estimates of often difficult to reach groups of interest. This strategic oversampling method relied on CHIS data from the prior year of collection, as well as auxiliary data from public sources such as voter registration, consumer databases, and Census planning to target six household attributes: 1) Korean household members, 2) Vietnamese household members, 3) other Asian household members, 4) Hispanic or

Spanish-speaker household members, 5) low educational attainment or non-U.S. citizen household members, and 6) households having children under the age of 18. A sample 2.5x larger than required for a simple random sample was generated, and then random samples within modelled strata were drawn until the required relative sampling fractions were met [105]. Within each geographic and modeled stratum, residential addresses were randomly selected. Once households were recruited, one adult aged 18 or older was randomly selected from each household. Additionally, if any children or adolescents were present in the household, one was randomly selected and offered the opportunity to participate in a separate survey, though their involvement in the study was not required [105].

Data Collection

Data collection for this study was multi-modal, using both telephone and online surveys. Telephone and online surveys were offered in English, Spanish, Mandarin, Cantonese, Vietnamese, Korean, and Tagalog. These options were based on Census data identifying languages spoken by the largest proportion of the state's population. Length of interviews ranged from approximately 35-64 minutes, with non-English interviews taking longer on average. Due to the sampling method, unhoused individuals or those living in state or federal facilities were not included for participation [106].

Missing Data

Overall nonresponse rates for the years included in these analyses were low. For most variables, responses were missing for fewer than 1% of participants. Surveys with valid responses for 80% of items or more were considered complete. Missing data were then replaced through imputation, exempting items considered highly sensitive. Imputation was carried out using three techniques: relational imputation, hot-deck imputation, and external data assignment [105].

The imputation process began with relational imputation. This technique replaces missing values based on the participant's responses to other variables, or the responses of another participant living in the same household. In the model-based hot-deck technique, a respondent's answer to an item is 'donated' or assigned to a participant missing that response who meets similar individual and household-level characteristics, as defined by a generalized linear model including a set of control variables. In each case, sociodemographic characteristics and geographic region were included in the model. Other control variables were included based on which variable was targeted for imputation [106]. Finally, external data assignment was used to impute geographic information for cases in which inconsistent responses were provided by the participants. After completing the imputation process, researchers performed a final quality control assessment to ensure consistency between participant responses and imputed values [105].

Weighting

Household and person-level weights were applied to compensate for a variety of factors, such as the probability of household selection, to adjust for under-coverage, and to reduce potential bias due to differences in characteristics between respondents and non-respondents. Person-level weights were adjusted using weight calibration, which forced CHIS weights to sum to estimated population control totals. These population control totals were drawn from estimates provided by the California Department of Finance, with the population living in institutions or group facilities removed [106].

Sample

The sample for this dissertation was drawn from CHIS data collection years 2015-2019 for pooled cross-sectional analyses. These years were selected due to the specificity of immigration status questions asked, as well as their contextual place following the implementation of the ACA but before the 2020 COVID outbreak, during which time health-seeking behaviors and the availability of care changed significantly. Participants were limited to those between 18 and 64 years of age due to the unique health needs of and resources available to adults aged 65 and older.

The sample was further restricted to individuals who reported delaying or foregoing medical services they felt they needed in the previous 12 months. These participants subsequently received questions on their reasons for delaying or forgoing care which were used to create barrier indicators, as explained in the *Measures* section below. Furthermore, this item is substantively preferable over instances of service use because it provides information on both whether services were used and whether they were needed. Health need is sometimes operationalized as having a medical diagnosis requiring ongoing care. However, populations with lower service access have lower odds of ever receiving a diagnosis and therefore diagnostic status is an inappropriate measure for this study [10].

Measures

Seven dichotomous indicators capturing systemic and institutional barriers to health care access were created using participant responses to a number of items. The indicators are as follows:

1. Access to adequate transportation as defined by the participant
2. Perceived affordability of care

3. Whether or not a participant has insurance coverage and the adequacy of that coverage
4. Whether a participant has experienced language barriers in a health care setting
5. Whether needed services were available in a timely manner
6. Experiences of administrative burden
7. Experiences of medical discrimination

Procedures

Descriptive Analyses

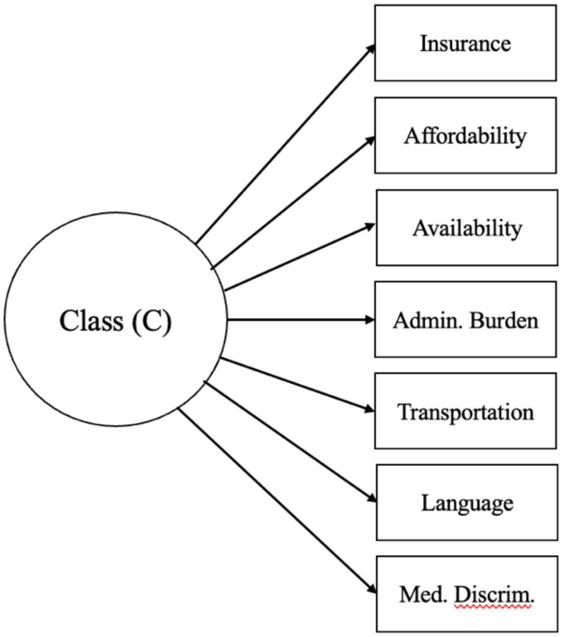
Weighted sociodemographic characteristics and endorsement of dichotomized barrier indicators for the pooled sample were calculated by immigration status. For participants born outside of the United States, immigration status was either naturalized U.S. citizen, permanent resident or "green card" holder, or other, which encompassed temporary visa holders, DACA recipients, undocumented residents, and any other non-permanent legal designation. Foreign-born status was self-reported by participants and therefore subject to potential underreporting, particularly for undocumented individuals. Many studies do not attempt to collect immigration status for this reason [95]. However, in their investigation of immigration status non-response rates in several state and national surveys, Bachmeier et al. found non-response to immigration status was slightly inflated, but comparably high to commonly imputed variables such as household income and not widespread enough to lead to substantially biased estimates [95]. Additionally, disclosures were included prior to each sensitive question in the survey reiterating that information provided was strictly confidential and could not be disclosed to U.S. Citizenship and Immigration Services or other enforcement agencies.

Latent Class Analysis

The primary aim of this analysis was to quantitatively understand heterogeneity in barriers to health care access within the immigrant population. To investigate this question, I conducted a Latent Class Analysis (LCA). LCA is a data reduction technique that groups observations together into subpopulations, or latent classes. Membership in classes is estimated based on patterns of responses to a set of observed dichotomous and/or ordinal indicators. Individuals can then be grouped together based on their probability of membership in a certain class [107]. For this reason, LCA is considered particularly useful when attempting to identify groups within a larger population that may benefit from targeted intervention.

Theoretically, this method would identify subgroups within the broader "immigrant" category more likely to endorse experiencing specific co-occurring barriers to health care access. For example, risk of deportation and language barriers may be more salient to those who are undocumented compared with naturalized U.S. citizens, and so on. For the purposes of this study, seven indicators were used to extract latent class membership. The path diagram including each observed indicator can be found in Figure 2 below.

Figure 2. Latent Class Analysis: Barriers to Health Care Access



The LCA model consists of two segments: a multinomial logistic regression, and a set of logistic regressions. The multinomial logistic regression, as shown in Figure 3a below, estimates the probability of falling into a particular class based on the individual's observed pattern of responses to the set of indicators. For example, if there are three classes, each participant will have three posterior probabilities indicating their likelihood of belonging in class 1, 2, or 3.

The series of logistic regressions, shown in Figure 3b**,** estimate the probability of endorsing each barrier to health care access given membership in a particular class. A conditional item-response probability is calculated for each outcome within each class. For example, given membership in Group 2, the likelihood of reporting lack of transportation as a barrier to health care seeking is X%. Coefficients for both class membership and endorsement of barriers to health care access were converted to marginal probabilities for ease of interpretation.

Figure 3a. LCA Model Formulation

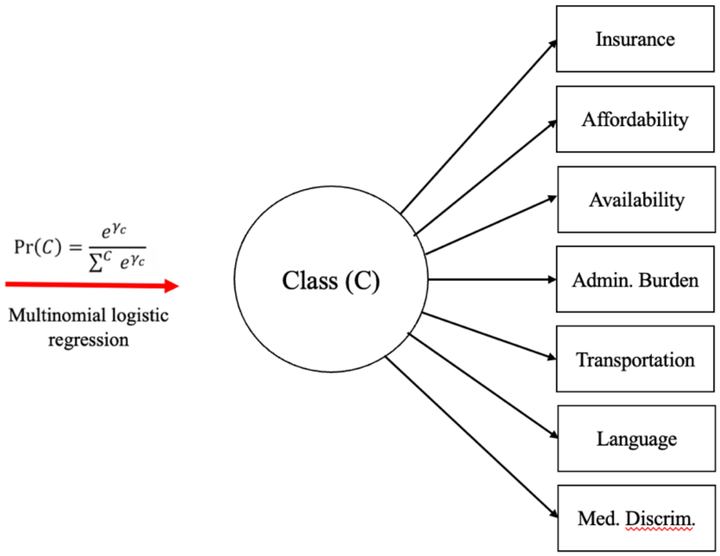
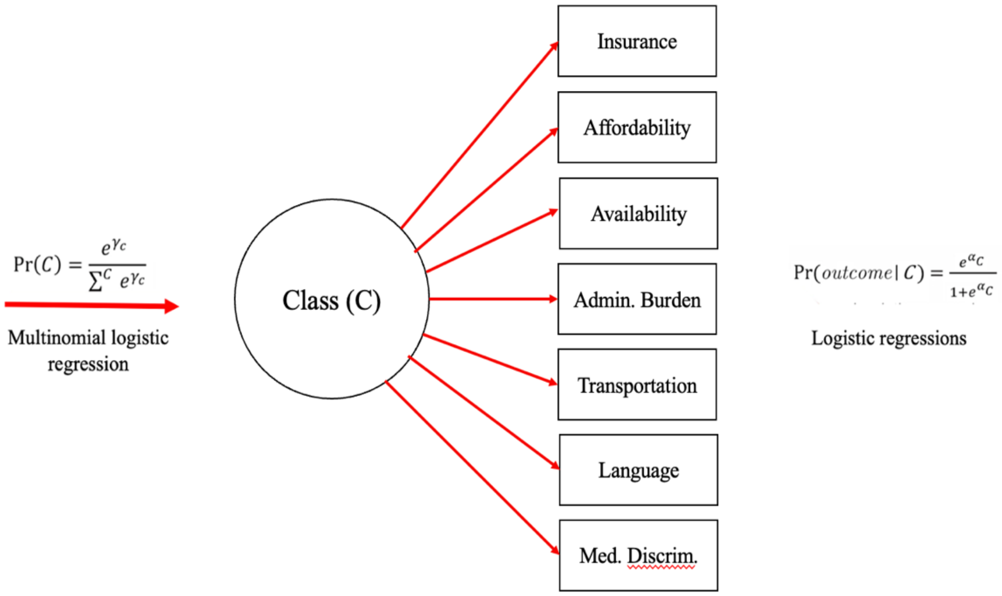


Figure 3b. LCA Model Formulation



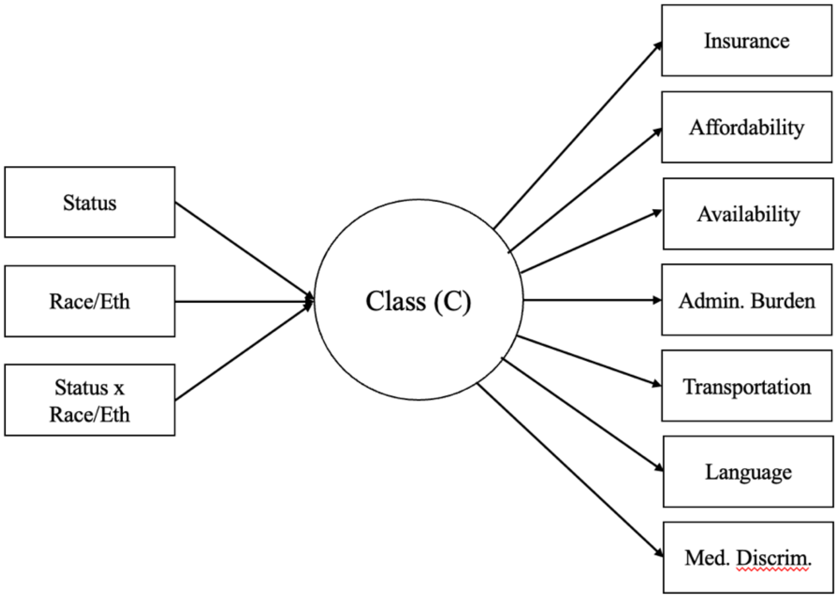
Evaluating Model Fit

The model was fit starting with one class and then increasing the number of classes until the model failed to converge and no more could be estimated. Beginning with a single class demonstrates whether the patterns of group response are homogenous or if there are more meaningful classes present. After reaching the maximum number of converging classes, those models were assessed for best fit using Akaike's Information Criterion (AIC) and Bayesian Information Criterion (BIC). Smaller values for both will indicate better model fit. Additional goodness of fit statistics, such as χ^2, comparing models were reported. Finally, diagnostic statistics, such as the average latent class posterior probability in the selected model, were considered. When all other criteria are met, 0.80 or higher on the diagonal of the posterior probability matrix indicates a well-fitting model [107].

Introducing Predictors

Once the intercept-only model was specified, the theorized predictors of class membership were assessed, beginning with immigration status, as shown in Figure 4 below, then with self-identified race/ethnicity, and finally a status x race or ethnicity interaction variable. The decision to assess the interaction between legal status and race or ethnicity was theoretically grounded in PHCR. As previously discussed in *Chapter 3: Theoretical & Conceptual Frameworks*, two central concepts of PHCR are intersectionality and racialization. In this study, for example, a participant who is undocumented and white may have a unique experience within the health care system compared to a participant who is undocumented and Latinx. Due to how immigration has been racialized, an undocumented participant being or being perceived as white may act as a protective factor against the risks associated with seeking care as an undocumented person. Undocumented persons of color, on the other hand, may be at higher risk of differential treatment due to race-based assumptions made about their legal status. The purpose of including this term in the LCA was to assess whether the interaction between immigration status and race or ethnicity would have an effect beyond that of immigration status and race or ethnicity alone.

Figure 4. LCA Predictors



Adjusting for Covariates

Once the appropriate model was selected and the measurement parameters fixed, potentially relevant controls were introduced into the model. Gender, age in years, annual household income, level of education, and number of years in the U.S. were included.

Chapter 4.2. Results
California Health Interview Survey

Descriptives

After applying exclusion criteria, the final sample (N=8,543) was predominantly Hispanic (42%) or non-Hispanic white (41%). Age ranged from 18-64 with an average of approximately 39 (SE=0.62). The majority of participants were female (56%), married (54%), and had incomes at 300% or higher of the federal poverty line (54%). Household size averaged 3.38 (SE=0.06) but ranged from 1-14.

21% of the total sample identified themselves as immigrants. Among them, 58% were naturalized US citizens, 23% were green card holders, and 19% were insecurely statused. Average number of years spent living in the U.S. ranged from approximately 28 years for naturalized citizens to just under 12 years for those with insecure statuses. Some sociodemographic characteristics, such as marital status, followed similar trends between status groups. Others, such as English proficiency and average income, differed greatly. Median annual household income was highest for US natives at $60,000 and decreased in each subsequent immigration category. Annual income was lowest for insecurely statused participants at $26,000.

Mexico, China, and the Philippines were the most common countries of origin for non-US born participants in this sample. 69% of immigrants completed the CHIS survey in English. Among those who completed the survey in a different language, Spanish was the most common.

Vietnamese, Korean, Cantonese, Mandarin, and Tagalog made up 2% or less. Full weighted sample characteristics can be found in Table 3 below.

Table 3. Weighted Sample Characteristics by Documentation Status, California 2015-2019*

	Total N=8,543	**U.S. Born N=6,779**	**Naturalized N=1,022**	**Green Card N=402**	**Insecure N=340**
Gender					
Male	0.44	0.46	0.34	0.47	0.61
Female	0.56	0.55	0.66	0.53	0.39
Education					
<H.S. dip.	0.04	0.02	0.08	0.22	0.08
H.S. dip	0.14	0.14	0.14	0.19	0.01
Some college	0.20	0.21	0.16	0.11	0.28
Voc/AA/AS	0.14	0.15	0.13	0.13	0.08
BA/BS	0.28	0.29	0.27	0.15	0.31
Graduate	0.19	0.19	0.22	0.21	0.24
Marital Status					
Spouse/Partner	0.54	0.53	0.58	0.60	0.61
Widowed	0.01	0.01	0.01	0.04	0.00
Divorced/Sep.	0.10	0.10	0.14	0.08	0.09
Never married	0.35	0.37	0.27	0.27	0.30
Race/Ethnicity					
White, NH	0.41	0.48	0.15	0.27	0.20
Hispanic	0.42	0.39	0.53	0.47	0.48
AAPI, NH	0.10	0.05	0.28	0.26	0.28
Black, NH	0.03	0.03	0.03	0.00	0.03
2+, NH	0.04	0.05	0.002	0.00	0.00
NA/AN, NH	0.002	0.002	0.00	0.00	0.00
English proficient					
Native/Well	0.96	0.996	0.89	0.76	0.73
Not well/at all	0.04	0.004	0.11	0.24	0.27
Poverty level					
0-99% FPL	0.14	0.12	0.18	0.33	0.01
100-199% FPL	0.18	0.17	0.20	0.15	0.33
200-299% FPL	0.15	0.15	0.12	0.20	0.14
300%	0.54	0.56	0.49	0.32	0.52
Age, *M(SE)*	39.24 (0.62)	38.16 (0.70)	44.44 (1.05)	42.66 (2.32)	36.64 (2.04)
Children, *M(SE)*	0.68 (0.04)	0.63 (0.05)	0.99 (0.12)	0.34 (0.13)	0.66 (0.20)
Household, *M(SE)*	3.38 (0.06)	3.36 (0.06)	3.60 (0.13)	2.96 (0.26)	3.35 (0.25)

*Data are expressed as weighted proportions

89% of participants rated their general health between good and excellent, and 75% reported having a usual source of health care. Only 5% of the sample reporting having no health insurance at some point in the last 12 months. Of those who did, average time without insurance was approximately 5 months. The most commonly reported reason for not having insurance was that it was too expensive (31%), followed by ineligible through work (28%). There were no significant differences between U.S.-born participants and immigrants reporting not needing care as a reason for not seeing a doctor in the past year. 7% reported having difficulty paying for basic necessities due to medical bills and 9% reporting taking on credit card debt to pay for care.

Weighted rates of endorsement of barriers to care revealed significant differences between immigration status groups for every factor except transportation. Overall endorsement of factors such as access to transportation and medical discrimination were low overall, whereas affordability and availability were the most common.

Table 4. Bivariate analysis of health care barrier endorsement by documentation status

	Total N=8,543	**U.S. Born N=6,779**	**Naturalized N=1,022**	**Green Card N=402**	**Other N=340**	***p*-value**
Availability	0.34	0.35	0.32	0.23	0.36	0.001**
Transport	0.02	0.02	0.01	0.00	0.02	0.105
Affordability	0.54	0.54	0.59	0.42	0.36	0.000***
Med disc.	0.06	0.05	0.08	0.12	0.14	0.000***
Admin burden	0.08	0.08	0.10	0.02	0.05	0.022*
Lang	0.05	0.05	0.06	0.08	0.11	0.000***
Insurance	0.21	0.20	0.21	0.22	0.33	0.000***

*p<0.05, **p<0.01, ***p<0.001

Latent Class Analysis

The LCA was carried out utilizing a three-step procedure according to recommended best practice [108]. This began with fitting and running the intercept-only model, then adding predictors, and, finally, adjusting for covariates.

Class Enumeration

Both statistical fit and substantive interpretability are considered when determining the appropriate number of classes for a LCA model. Rather than beginning with a theorized number of classes, we assume homogeneity in the sample and increase the number of classes from one until the model fails to converge. To begin, the seven health care barrier indicators were entered into the intercept-only model. The single-class base model and two-class model converged successfully. The three-class model did not converge with the standard 300 iterations. When the number of iterations was increased, the three-class model converged. Complete failure to converge was reached at four classes.

Model fit was then assessed by multiple indicators. Marginal probabilities were calculated for each class solution. In the three-class model, roughly 44% of the sample fell into class one, 39% into class two, and 17% in class three (Table 5). This follows the common standard of the smallest viable class containing 8% or more of the sample and provided initial support for a three-class model (109).

Table 5. Latent class marginal probabilities

	Margin	SE	CILL	CIUL
C1	0.44	0.01	0.42	0.46
C2	0.39	0.01	0.38	0.41
C3	0.17	0.02	0.14	0.20

Next, Akaike's Information Criterion (AIC) and Bayesian Information Criteria (BIC) were calculated for each class. Smaller values in both AIC and BIC indicate a better fitting model. As seen in Table 6 below, both AIC and BIC values were lower for the three-class model (AIC=44654.26; BIC=44809.42) than the single or two-class models.

Table 6. Goodness-of-fit statistics for one- to three-class models

Model	loglikelihood	AIC	BIC
1 class	-22985.44	45984.88	46034.25
2 class	-22464.35	44958.70	45064.49
3 class	-22305.13	44654.26	44809.42

χ^2 was also taken into consideration and was significant (χ^2 (105)=166.83, $p<0.001$). However, χ^2 is not considered a reliable goodness-of-fit indicator with large sample sizes, and is typically significant in these cases regardless of model fit [110]. Given the size of this sample (N=8,543), AIC and BIC will be preferred.

Finally, posterior probabilities of each class were calculated for each observation. Those values were used to generate maximum posterior probabilities for each class and then assigning class membership to each participant. A classification matrix was used to compare the posterior probabilities of each predicted class. Comparing the diagonal to the off-diagonal, values on the diagonal should be as high as possible, and off-diagonal values as low as possible. Diagonal values, as highlighted in Table X below, over 0.80 indicate a well-fitting model [107].

Table 7. LCA Classification Matrix

	Predicted posterior prob (1.C)	**Predicted posterior prob** (2.C)	**Predicted posterior prob** (3.C)
Predclass			
1	**0.95**	0.00	0.05
2	0.00	**0.97**	0.03
3	0.09	0.09	**0.82**
Total	0.44	0.39	0.16

This tells us that if someone is predicted to be in class one, on average, the posterior probability of being in class one is 0.95. This is similar to the LCA fit statistic entropy, but provides more information on how well each class is being delineated from the others. All classes in this case were well-identified, with class two being the best identified. With all reliable fit indices indicating a three-class solution, three classes were entered into the preceding intercept-only model.

Intercept-only Model

In the intercept-only model, we are interested in obtaining the probabilities of endorsing each health care barrier for each of our three latent classes. The multinomial logistic regression provided estimated coefficients for membership in class two (B=-0.12, SE=0.03, p<0.001) and class three (B=-0.96, SE=0.12, p<0.001). Based on the negative coefficients, participants' probability of being in class two or three was lower than class one. Converting this logit scale coefficient to marginal probabilities, class one (44%) was largest, followed by class two (39%), and class three (17%).

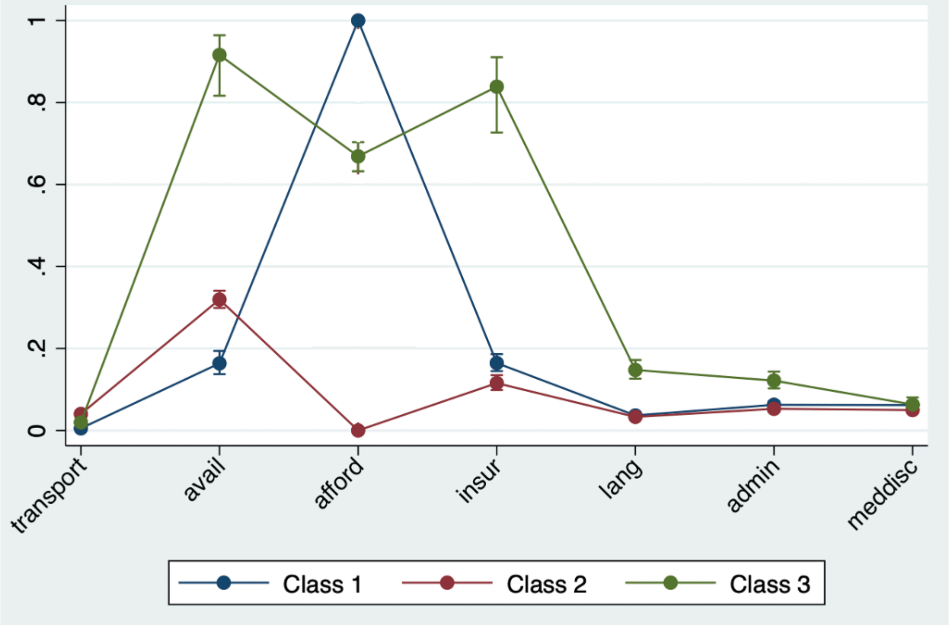
Results of the logistic regressions with robust standard errors for the indicators in each class are shown in Table 8 below. These latent class coefficients have been converted to marginal probabilities for ease of interpretation.

Table 8. Probability of Health Care Barrier Indicators in Latent Classes

	Class 1		**Class 2**		**Class 3**	
	Prob.	SE	Prob.	SE	Prob.	SE
Transport	0.01	0.001	0.04	0.003	0.02	0.005
Availability	0.26	0.01	0.32	0.01	0.92	0.04
Affordability	1.00	0.00	0.00	0.00	0.67	0.02
Insurance	0.16	0.01	0.12	0.01	0.84	0.05
Language	0.04	0.004	0.03	0.003	0.15	0.01
Administrative	0.06	0.004	0.05	0.004	0.12	0.01
Med. Discrim.	0.06	0.004	0.05	0.004	0.06	0.008

These probabilities show patters of endorsement for each class. For example, for participants in class one, the most commonly indicated barriers to health care access were affordability (100%) and availability (26%). This is more easily visualized in Figure 5.

Figure 5. Class Characteristics



Class one showed a low probability of endorsing most barriers, with the exception of affordability. Membership in class one was associated with a 100% probability of reporting affordability as a reason to delay or forgo care. Class two had a low probability of endorsing barriers overall. Participants in class three had a high probability of endorsing availability, affordability, and insurance barriers to care. Language barriers, administrative burden, and medical discrimination, while not high, were higher in class three than the first and second. Overall, participants in all classes had a very low probability of reporting transport issues and medical discrimination.

Predictors and Covariates

In addition to estimating class membership based on endorsement of health care barriers, immigration status, racial or ethnic identification of participants, and the interaction between the two were regressed on class membership in order to test whether those factors would significantly predict which class participants were assigned to. Socio-demographic characteristics within each latent class are shown in Table 9. When the four-level immigration status variable was added to the model, it was unable to converge. Two options were available to successfully run the model: immigration status could be dichotomized into U.S.-born and non-U.S.-born, or U.S.-born participants could be removed from the sample, leaving three levels of immigration status. Because one of the purposes of this dissertation was to assess status-level differences among immigrants in their experiences in the healthcare system, the latter option was selected. The exclusion of U.S. citizen left a sample of N=1,764. Status options were naturalized U.S. citizen, Green Card holder, or less than a Green Card, which has been labelled as ‘insecure’ as described in *Chapter 4.1: Methods*. Due to small cell sizes for Black and Native American participants, the influence of race or ethnicity was assessed for three categories – non-white Hispanic, white, and non-Hispanic Asian. Analyses were adjusted for sex, age, income, level of education, and number of years residing in the US.

Table 9. Socio-demographic Characteristics Across Latent Classes

	Class 1 (44%)	**Class 2** (39%)	**Class 3** (17%)
Legal Status, %			
Naturalized	76.39	61.12	65.11
Green Card	13.59	21.51	11.92
Insecure	10.01	17.37	22.97
Race/Ethnicity, %			
Non-Hispanic, white	23.26	14.90	14.27
Non-white, Hispanic	58.61	43.48	62.34
Non-Hispanic, Asian	18.13	41.63	23.39
Gender, %			
Female	64.51	59.43	45.69
Age, *M(SE)*	42.55 (1.45)	42.04 (0.97)	47.23 (2.78)
Income, *Median*	73,066.07	98,225.58	64,635.87
Education, *M(SE)*	3.91 (0.27)	4.00 (0.22)	4.00 (0.31)
Years in US, *M(SE)*	25.99 (1.90)	22.24 (1.91)	23.35 (2.65)

Table 10 below presents parameter estimates for class predictors with covariates entered with class one used as reference. Looking first at immigration status, when controlling for sex, age, income, level of education, and number of years in the U.S., insecurely statused participants were significantly more likely to belong to class three (B=1.49, SE=0.73, p<0.05). Class three was the only class to be predicted by immigration status, with green card status failing to significantly predict membership in any class. Assessing race or ethnicity, non-Hispanic Asian participants were significantly more likely to be assigned to class two (B=0.83, SE=0.36, p<0.05) or class three (B=0.93, SE=0.32, p<0.01) compared with white participants. Non-white Hispanic identity did not significantly predict assignment in any class.

When adding both main effects and the interaction term to the model, the interaction between legal status and race or ethnicity did not significantly predict class membership. In other words, including the interaction in the model did not provide any additional information on class characteristics. Considering the covariates included in this model, participants in class two reported significantly higher incomes than class one (*B*=0.001*, SE*=0.0000003*, p*<0.001), and members in class three were significantly younger (*B*=-0.02*, SE*=0.01*, p*<0.05). Differences in class characteristics will be more thoroughly interpreted in *Chapter 6. Discussion.*

Table 10. Parameter Estimates for Latent Class Models

	Class 1 vs. Class 2			**Class 1 vs. Class 3**		
	B	Std. Error	*p*-value	*B*	Std. Error	*p*-value
Immigration status						
Green Card	-0.16	0.51	0.75	0.22	0.44	0.61
Insecure	0.73	0.99	0.46	1.49	0.73	0.04*
Race/Ethnicity						
Non-white, Hispanic	-0.31	0.34	0.37	0.47	0.27	0.08
Non-Hispanic, Asian	0.83	0.36	0.02*	0.93	0.32	0.003**
Status x Race/Ethnicity						
Green Card x Hispanic	0.12	0.62	0.85	-0.23	0.48	0.64
Green Card x Asian	1.25	0.97	0.20	-0.31	0.90	0.73
Insecure x Hispanic	-0.67	1.02	0.51	-1.46	0.75	0.053
Insecure x Asian	0.02	1.29	0.99	-0.68	1.07	0.52
Gender						
Female	0.31	0.22	0.15	0.13	0.16	0.41
Age	-0.01	0.01	0.57	-0.02	0.01	0.02*
Income	0.01	0.00	0.000***	0.00	0.00	0.89
Education	-0.04	0.07	0.61	-0.04	0.05	0.44
Years in US	0.00	0.01	0.19	-0.00	0.01	0.80

*p<0.05, **p<0.01, ***p<0.001

Chapter 5.1. Methods
Critical Policy Analysis

Part two of this study is a mixed-methods critical policy analysis exploring inconsistent county-level implementation of the California Values Act (SB 54), and the relationship between deportation risk and avoidance of health care services within that context. Critical policy analysis (CPA) is a method derived primarily from hermeneutics and critical theory [111] that has been defined as exposing inconsistencies between the language of policy and its actual implementation [112]. The goal is to interrogate the gap between what has been called *policy-in-intention* and *policy-in-action*. The hermeneutic model argues that analysis must go beyond describing a problem. As an applied discipline, the ultimate purpose of CPA is to identify change in real world settings, and how existing structural inequality is maintained or challenged through policies [113, 114]. Therefore, the method applies three overarching criteria: 1) contextuality with particular attention paid to societal power structures, 2) defining the problem relevant to the concerns of stakeholders, and 3) empirical identification of positive or negative change as a result of implementation [115].

Procedures

This analysis built off of a previous assessment conducted by Pavlovic & Ma [118], and included an overview of the state and national policy environment that led to SB 54, a thorough description of the main provisions of SB 54, and the legal framework supporting it. Next, a three-step critique adapted from Chalip [111] was applied:

1) Critique the assumptions made in SB 54 – for example, that the implementation of this policy would result in a decreased risk of contact with immigration authorities.

Each assumption pulled from the language of SB 54 was supported or refuted utilizing existing evidence.

2) Explore why inadequacies in consistent implementation persist
3) Identify potential reforms for more equitable and effective implementation.

Steps two and three of this critique are included in *Chapter 6. Discussion.*

To date, CPA has predominantly been used in the field of education policy, and analyses are most often qualitative in nature [116]. This underutilized method is useful to a variety of fields outside of education interested in ensuring that policies are effective, equitable, and responsive to community needs. Expanding upon traditional policy analysis, CPA provides several additional benefits. First, it provides an in-depth assessment of the legal context under which communities of interest are living. In this study, this context brings an additional dimension to the observed trends in service seeking. In line with the SDOH framework, CPA evaluates the root causes of an issue through an equity-focused lens and how policies are either effectively addressing them, falling short of intentions, or exacerbating existing disparities. This allows for more informed decision-making by providers, program administrators, and policymakers.

This mixed-methods critical policy analysis extended to include a supplementary quantitative assessment of the assumption made by the architects of SB 54 that jurisdictions implementing more stringent versions of SB 54 provided more protections for immigrants, thus creating safer environments [117]. Given the established chilling effect of fear of immigration enforcement on care seeking [29, 69, 70, 88], the primary objective of this analysis was to understand how county-level immigration enforcement differed by SB 54 implementation, and the associated trends in foregoing needed health care services for individuals holding different legal statuses within those local contexts.

Six counties were selected for assessment and sorted into three categories based on their implementation of SB 54 [118]. The first two, Orange County and San Diego County, represent baseline implementation. San Mateo County and Alameda County were assigned mid-level implementation. Los Angeles County and San Francisco County represent high-level implementation, going beyond the protections required in order to be in compliance with the law. Quantitative analyses were guided by three questions:

1) Did risk of contact with ICE differ pre- and post-SB 54 in counties based on their level of implementation? Annual arrest rates relative to the estimated undocumented immigrant population for years 2017 and 2018 were compared by county implementation categories.
2) How did rates of foreign-born individuals foregoing needed health care differ pre- and post-SB 54 in counties based on their level of implementation? Annual rates of CHIS participants reporting they delayed or did not receive needed medical care were compared.
3) Is higher county-level risk of contact associated with higher rates of health care avoidance? Pearson correlation was used to assess the relationship between risk and health care avoidance rates.

Results of the quantitative assessment were integrated within the qualitative analysis of SB 54's provisions and its county-level implementation by California LEAs.

Data Sources

Qualitative data for this assessment came from the text of the bill itself, as well as publicly available memoranda and statements released by county LEAs on their policies regarding SB 54. Public statements on SB 54 were compiled using Quorum, a public affairs database containing digitized copies of bills, statements, and other official documents at the state and federal levels. Additional documents not available through Quorum were collected through county public record databases and official guidance from the Department of Homeland Security (DHS).

The quantitative component of this analysis relied on the CHIS dataset with arrest rates appended. Rates of forgoing or delaying care reported by CHIS participants were calculated by year and county. Risk of contact was calculated as ICE arrests relative to the estimated undocumented population for each county. Data on county-level ICE arrests were pulled from USCIS and the Transactional Records Access Clearinghouse.

Chapter 5.2. Results

Critical Policy Analysis

California Values Act (SB 54)

SB 54, or the California Values Act, is a complex package of legislation signed into law on October 5, 2017 by Governor Jerry Brown and enacted January 1, 2018 [99]. Written by California Senate President Kevin de León, the primary purpose of SB 54 was to disentangle state and local law enforcement agencies (LEAs) from the federal immigration enforcement apparatus. This bill came largely in response to the Trump Administration's increasingly restrictive federal immigration policies and earned California the title of "sanctuary state" among advocates and opponents alike.

Despite the common characterization of California and a number of cities across the country as immigrant sanctuaries, there is currently no legal definition of sanctuary. The Congressional Research Service has classified these so-called sanctuary policies into three categories: don't enforce, don't ask, and don't tell [119]. Traditionally, "don't enforce" policies focus on restricting state and local agencies from assisting or acting on behalf of federal immigration authorities. "Don't ask" policies bar LEAs from asking a person their immigration status. "Don't tell" policies limit information sharing between LEAs and immigration enforcement [119]. SB 54 was unique in that it targeted all three.

Execution of this ambitious package of legislation was not without its obstacles. To a certain degree, SB 54 is subject to discretionary implementation, meaning that LEAs retain flexibility in determining the extent to which they will cooperate with immigration enforcement agencies within broad guidelines [99]. This flexibility has, in some cases, allowed counties to go above and beyond in their detachment from immigration authorities. In others, it has led to confusion, legal challenges, and inconsistent compliance. This critical analysis provides an overview of the state and national policy environment that led to SB 54, summarizes the main provisions of the bill, and critiques assumptions made by the authors about the effect implementation would have on LEAs and the immigrant community in California.

Immigration in California

California has arguably one of the most unique historical and contemporary immigration policy environments in the country. When the Mexican-American War ended in 1848, thousands of Mexicans living in what would become the state of California became immigrants overnight [120]. The Treaty of Guadalupe Hidalgo [121] gave them the option of becoming US citizens with the promise to respect private land holdings [122]. Those who stayed, however, found these provisions would not be federally enforced, particularly after the Gold Rush saw upwards of 300,000 people inundating the state by 1852 [123]. Even as US citizens, Mexicans in California faced illegal land seizures, language barriers to legal and political participation, and saw themselves relegated to second class citizens amid newly-enacted racial segregation policies [124].

The rapid influx of people and commercial interests during and after the Gold Rush paved the way for further conflict between white Americans and those they viewed as outsiders. The aforementioned Chinese Exclusion Act of 1882 is considered the first significant legal restriction of immigration in US history [125]. This policy spawned from labor hostilities beginning in San Francisco. San Francisco’s largely Irish labor force violently campaigned against the exploited Chinese railroad workers, culminating in anti-Asian legislation and public sentiment that would persist well into the 20th century [124]. This reached an apex following the attack on Pearl Harbor, after which California's Japanese population was forcibly removed and incarcerated, 2/3 of whom were US citizens [126].

The boom following World War II saw a loosening of legal restrictions on immigration and a more globally-oriented outlook, resulting in a steady flow of immigration into California which had become an economic powerhouse during the war. Rapid demographic shifts in the state's population followed. In 1940, approximately 90% of California residents were white. By 1990, that had dropped to 57% [124]. Today, roughly 25% of California residents are foreign-born and nearly half of the state's children have at least one immigrant parent. Over the past decade, surveys conducted by the Public Policy Institute of California have found broad support for immigrants across demographic blocs and geographic regions [127]. Despite this support, partisan divides in the state and federal policies continue to put strain on immigrant communities. State legislators have introduced policies to relieve these burdens, some of the most prominent of which have been those targeting immigration enforcement.

U.S. Immigration Enforcement

Before the creation of a national agency, states were responsible for their own immigration enforcement. Immigration came under federal oversight in 1891 when Congress established the Office of Immigration. Federal structuring of agencies went through several iterations in the following decades, finally consolidating into the Immigration and Naturalization Service (INS) in 1933 [128]. INS controlled processing, enforcement, and border security until 2002, when the

Homeland Security Act (129) split the agency into two arms: the U.S. Citizenship and Immigration Service (USCIS) and Immigration and Customs Enforcement (ICE). Today, USCIS is responsible for administrative processing and ICE controls internal immigration enforcement [128].

Contemporary formal collaboration between immigration enforcement and LEAs began with the passing of IIRIRA under the Clinton Administration in 1996 [78]. Among the many provisions of this legislation was Section 287(g). Section 287(g) allowed LEAs to enter into formal agreements with DHS, deputizing local officers and allowing them to act on behalf of federal immigration agents. Agreements differed somewhat between LEAs, but broadly this program allowed officers to ask individuals their immigration status, hold and transfer individuals on behalf of ICE, issue a charging document to begin the removal process, and granted access to DHS and ICE databases [130].

Although the IIRIRA and section 287(g) went into effect in 1997, LEAs did not begin acting with and on behalf of immigration enforcement until 2002 and the establishment of ICE. The number of 287(g) agreements grew throughout the early 2000s [6] and primarily fell into one of two categories: the jail enforcement model and the warrant service officer (WSO) model. In the jail enforcement model, deputized officers are permitted to interrogate and place immigration detainers on arrested individuals suspected to be noncitizens. The WSO model allows officers to execute administrative warrants and make arrests on behalf of ICE (130Four California counties had 287(g) agreements between 2002-2016: Los Angeles, Orange, Riverside, and San Bernardino. Full details of these agreements can be found in Appendix B, pages 1-60.

Subsequent research on the impact of 287(g) programs found a significant uptick in racial profiling, diverted state and local funds to federal priorities, and damaged community relationships with law enforcement [130]. In response, California began passing legislation dismantling the relationship between LEAs and ICE, and established the legal underpinning of SB 54.

TRUST & TRUTH Acts

On January 1, 2014, the California Transparency and Responsibility Using State Tools (TRUST) Act [131] went into effect. This law prohibited LEAs and correctional facilities from continuing to detain individuals on behalf of ICE beyond the point that individual became eligible for release under state law [131]. The TRUST Act aimed to end unnecessary and potentially unconstitutional holds of non-violent offenders based on their immigration status alone, and to limit the impact of the controversial federal Secure Communities program (S-Comm) [81]. S-Comm, implemented in 2008, required LEAs to screen all arrests through ICE databases to check for immigration violations [6]. This program resulted in over 90,000 deportations in California alone [132]. The TRUST Act did not stop information sharing – in this case fingerprints – between ICE and LEAs or ICE's physical access to detention facilities. It simply did not allow LEAs to hold individuals on behalf of ICE in order for them to take custody of the individual [133].

Three years after the TRUST Act, California Governor Jerry Brown signed the Transparent Review of Unjust Transfers and Holds (TRUTH) Act [134]. This Act went a step further than its predecessor, targeting information sharing between LEAs and ICE. LEAs choosing to notify ICE of the release date and time of an inmate with an immigration detainer would be required to provide the individual with a written consent form explaining the purpose of an ICE interview, that the interview is voluntary, and that they could decline to be interviewed. Consent forms must be offered in specified languages, and additional documentation must be provided to the individual, including documents received from ICE [135]. This policy acted as an administrative barrier to information sharing. The following year, SB 54 went into effect.

Overview of Provisions

SB 54 amended Division 7 Title 1 of the Government Code [136], specifically Sections 7282 and 7282.5, added Chapter 17.25, and repealed section 11369 of the Health and Safety Code [137]. Three justifications were given for these changes: to build trust between communities and law enforcement, to protect limited state and local funds from federal responsibilities, and to avoid Constitutional violations.

Provisions of SB 54 fell into five main categories [99]:

1. Daily Operations
2. Hold, Notification, & Transfer Requests
3. Task forces
4. Correctional Facilities
5. Reporting

Daily Operations

A primary target of this legislation was daily operations. LEAs were banned under SB 54 from using “department moneys or personnel to investigate, interrogate, detain, detect, or arrest persons for immigration enforcement purposes” [99]. Deputization of officers by ICE to act on their behalf was no longer allowed, cancelling any active 287(g) agreements in the state.

In practice, this restricted certain behaviors by state and local officers. Officers were no longer permitted to ask a person’s immigration status and could not make or participate in arrests based on deportation orders or other immigration violations. Carrying over from the TRUST Act, they could not hold individuals longer than necessary for ICE. For example, if an officer pulled someone over for a traffic violation and suspected that they may be undocumented, they were no longer permitted to detain them there longer than the time taken to issue the citation so that ICE could arrive on the scene. For individuals in custody, ICE or Border Patrol agents could not be used as interpreters, and immigration agents were not able to interview detainees without written consent.

Hold, Notification, and Transfer Requests

Holds, notifications, and transfers, collectively termed ‘detainers’, are voluntary requests from immigration enforcement to LEAs. Prior to SB 54, ICE would regularly submit requests to LEAs to either hold an individual in custody, notify them of release date, or physically transfer them into ICE custody [118]. Under the new law, individuals could no longer be held in jail for extra time to allow immigration agents to take them into custody. LEAs were also not permitted to provide personal information or release dates in response to a request for notification. Transferring custody from LEAs to ICE was similarly barred.

There were exceptions to these guidelines and individuals were subject to enhancement. Enhancement is defined as having committed a serious or violent felony according to the Penal

Code in the past 15 years. It also included convicted misdemeanors for violent crimes, such as assault, battery, or sexual abuse, in the past 5 years. In cases of enhancement, LEAs were allowed to notify or transfer individuals into ICE custody after providing advanced written notice and a copy of ICE or Border Patrol's request.

Task Forces

Joint task forces with immigration authorities, similar to 287(g) programs, redirect local resources towards enforcement priorities [118]. Under SB 54, LEAs could no longer participate in task forces whose "primary purpose is immigration enforcement" but could be involved in those "related to a violation of state or federal law unrelated to immigration".

Correctional Facilities

SB 54 reinforced the TRUTH & TRUST Acts' provisions on access to California Corrections and Rehabilitation facilities. Facilities remained unable to hold inmates after they became eligible for release under state law, and immigration agents could not conduct interviews related to immigration offenses in these facilities without written consent. Furthermore, they could not limit access to rehabilitation and educational programs or determine custodial status with consideration to immigration status.

Reporting

The state attempted to integrate accountability measures into the language of SB 54. When the policy was implemented, California's Attorney General was tasked with creating model policies for state-run facilities on how to remain compliant in their interactions with immigration enforcement. In addition to LEAs, this pertained to settings such as schools, libraries, and public health facilities. Each was required to show that they had implemented a recommended or equivalent policy. Similar settings not run by the state related to health, education, and criminal justice were encouraged, but not required, to adopt model policies as well. Furthermore, each LEA was obligated to submit annual reports on the number of persons transferred from LEAs to immigration authorities, as well as the details of any joint task force participation.

Assumptions

Three main assumptions were examined for the purposes of this analysis. The first was that SB 54 would be uniformly adopted. When SB 54 went into effect in 2018, it set off a string of federal, county, and municipal legal responses. On March 6, 2018, the US Justice Department under the Trump Administration sought a preliminary injunction in the Eastern District of California, alleging that SB 54 violated the Constitution's Supremacy Clause [138], which prohibits state laws from working against federal interests. California countered that this policy did not fall under the Supremacy Clause and avoided potential violations of the Fourth Amendment and the Equal Protections Clause [139, 140]. California's argument was supported by the Tenth Amendment's Anti-Commandeering Doctrine [141], which bars the federal government from forcing states to perform regulatory functions on their behalf [142].

In July of the same year, the District Court denied the Administration's injunction and granted California's motion to dismiss claims against SB 54. This decision was appealed to the Ninth Circuit, who upheld the District's ruling in April 2019 [143]. The Trump Administration also attempted to withhold federal grants from jurisdictions failing to share information with immigration authorities under Section 9(a) of Executive Order 13768 [144]. However, this was similarly blocked by the Ninth Circuit [142]. In June 2020, the US Supreme Court declined to hear the appeal, effectively ending the legal battle against SB 54 [145].

Despite failed legal challenges, not all counties in California were supportive of this policy and LEAs retained flexibility to continue working with immigration authorities within the gray areas left by the law. For the purposes of this analysis, six counties were selected representing three levels of implementation and policies from each were assessed. The first, base-level implementation, maintained minimum standards required to be in compliance with the law and were, in some cases, found to be noncompliant.

Base-Level Implementation: Orange County & San Diego County

Orange County is the third most populous county in California [146] and was strongly opposed to SB54. The County Counsel voted to join the federal lawsuit against California and a number of municipalities within the county attempted to opt-out of participation in SB 54 before the legal battle ended in the Ninth Circuit. Orange County was one of the few in California to have a 287(g) agreement under the Homeland Security Act [129]. In their Memorandum of Agreement (Appendix B, page 1), DHS empowered the Orange County Sheriff's Department to identify and begin removal processing on undocumented individuals in county jails or other correctional facilities under ICE supervision. This Memorandum also allowed Orange County to enter into an Inter-Governmental Service Agreement, which would allow continued detention of inmates for immigration authorities past the completion time of their original sentence, as well as physical transfers to ICE custody. Personnel deputized under this agreement were given access to DHS databases and associated applications. Orange County was responsible for all personnel expenses.

When SB 54 was passed in 2017, Sheriff Sandra Hutchens ended the department's 287(g) agreement but issued an official statement in opposition to SB 54 (Appendix B, page 63). In this statement, she claimed that the policy would release "undocumented criminals" into the community, including "known criminal gang members" despite SB 54's enhancement provision. In a separate statement (Appendix B, page 61) Sheriff Hutchens informed the county that before SB 54 went into effect, her department would work with immigration authorities to "develop protocols that are both SB 54 compliant and successful in providing federal law enforcement with the access they need to keep serious offenders off our streets." In an enforcement procedures memorandum issued in December 2017 (Appendix B, page 67), the Orange County Sheriff's Department reasserted their ability to allow ICE into correctional facilities under the TRUTH Act, given written consent. They also pledged to continue screening inmates and honoring detainers to the fullest extent of the law.

In March of 2018, Sheriff Hutchens released a statement announcing the department's new online database "Who's in Jail" (Appendix B, page 62). This database circumvented SB 54's restrictions on sharing the personal information and release dates of immigrants with ICE by making all county inmate release dates publicly available. Furthermore, evidence suggests that the Orange County Sheriff's Department was continuing to make arrests based on status – an investigation by local organizations in conjunction with the ACLU found approximately 4,000 inmates in Orange County facilities charged only with illegal entry in direct violation of the law (147).

San Diego County, though less vocally opposed to SB 54, also maintained minimal compliance. The updated guidance issued by the Sheriff's Department outlined the basic requirements of SB 54 without providing additional details on how implementation would look in their county or any publicly available training materials (Appendix B, page 77). LEAs within the county were slow to update their policies, with three having incomplete internal policy updates as late as 2019 [148]. ICE was still allowed in San Diego correctional facilities and the county expressed their intent to honor ICE detainers in all legal cases. Like Orange County, San Diego also began publicly posting all inmate release dates. The one area in which they provided additional protections was no longer allowing license plate tracking data to be shared with ICE (Appendix B, page 83).

Mid-Level Implementation: San Mateo County & Alameda County

San Mateo and Alameda counties were not particularly outspoken about SB 54, but did provide additional protections beyond baseline compliance [118]. In a general order issued by the Alameda County Sheriff's Department in 2018, the county would no longer "accept nor honor detainers from ICE" unless the individual had a judicial warrant (Appendix B, page 90). Their updated policy included explicit language barring officers from communicating with ICE regarding any persons "detained, arrested, or in custody" except in cases of enhancement, or initiating enforcement activities in their daily duties based on suspicions of immigration status. Though they did not place any additional restrictions on task force participation, they did provide clarification and reporting guidelines (Appendix B, page 99). Finally, the Sheriff's Department provided a training bulletin for staff outlining the new law, what policies it amended, and specifics on which convictions would qualify an individual for enhancement (Appendix B, page 101).

Although the sheriff initially claimed that cooperation with immigration authorities was Constitutionally authorized, San Mateo similarly decided not to honor ICE requests to notify and did not make all inmate release dates public. According to guidance from the Sheriff's Department, LEAs could only honor detainers in the case of serious or violent felonies or judicial warrants (Appendix b, page 119). This decision excluded certain misdemeanors from enhancement. Further restrictions were placed on information sharing in 2023 when a county ordinance banned all county employees from cooperating with immigration officials [149].

High-Level Implementation: Los Angeles County & San Francisco County

Los Angeles County also had a 287(g) program prior to the implementation of SB 54. Their Memorandum of Understanding (Appendix B, page 19) was more explicit in the authority and functions given to deputized officers than Orange County's Memorandum. Deputized members of the Los Angeles Sheriff's Department were empowered to "interrogate any alien or person believed to be an alien as to his right to be or remain in the United States." They were also permitted to process those suspected of immigration violations for ICE review, to prepare detainers, take sworn statements, and draft Notices to Appear.

Following SB 54, LA County went beyond the requirements established by law to limit cooperation with immigration officials [118]. This was considered a significant departure from the county's earlier level of collaboration with immigration authorities. For example, LA County had recently been found guilty in a class action lawsuit of illegally detaining over 10,000 people between 2010-2014 for over 48 hours on the basis of only an ICE detainer [150]. LA County's policy explicitly laid out each new requirement under the law, changes in daily operations, and any legal exceptions. Furthermore, any arrests or transfers based on enhancement has to be approved by the Department's Immigration Liaison Officer (Appendix B, page 123).

LA County also tackled one of the grey areas of the law – proxy questions. Under SB 54, officers could no longer ask an individual their immigration status. Some LEAs began using place of birth, which they were permitted to ask, as a proxy of immigration status. LA's policy provided specific circumstances in which it is allowable to ask for place of birth (Appendix B, pg. 126), limiting officers' ability to ascertain status via proxy. As with Alameda and San Matteo Counties, LA did not honor detainers without a judicial warrant or make information on inmates publicly available, but maintained ICE's access to correctional facilities (Appendix B, pg. 127).

San Francisco County had the highest level of disengagement from federal immigration authorities. In addition to the policies seen in LA County, San Francisco prohibited ICE from accessing their correctional facilities and databases (Appendix B, page 134) in conjunction with their Sanctuary City Ordinance [151]. They also placed additional restrictions on qualifications for enhancement. Serious or violent felonies had to take place in last seven years rather than 15 established by SB 54 (Appendix B, page 139). By their own internal monitoring policy, LEA compliance in San Francisco County is periodically reviewed by the Human Rights Commission (Appendix B, page 135).

The second assumption assessed in this analysis was that implementation of SB 54 would lead to decreased community contact with immigration enforcement. One of the primary justifications for SB 54 was eroding trust in law enforcement within immigrant communities, evidenced by a precipitous drop in willingness to report crimes for fear of enforcement action [6, 152]. The authors of the bill asserted that if LEAs could no longer act as immigration enforcement, risk of contact would decrease and trust would be established [99]. However, as discussed in the section above, implementation of the law was inconsistent and many LEAs continued working with ICE to some extent. Furthermore, lack of local collaboration with ICE did not necessarily equate to a reduced presence of enforcement agents.

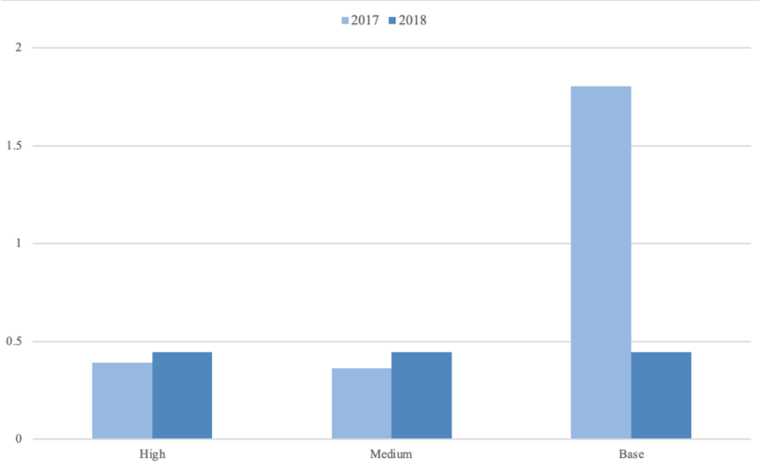
Following the passing of SB 54, President Trump threatened both to increase ICE's presence in California in response to the bill, and later to pull immigration agents out of California entirely [153]. Acting ICE Director Tom Homan made a clearer statement, vowing to significantly increase the federal presence in California and warned they would be forced "to conduct at-large arrests in local neighborhoods and at worksites, which will inevitably result in additional collateral arrests" [154]. ICE has three enforcement and removal operations field offices in California [155], but it is unclear exactly how many agents are active in the region at any given time, as ICE does not disclose its distribution of personnel [156].

In order to investigate the claim that SB 54 would decrease risk of contact with immigration authorities, a risk variable was calculated for CHIS participants identifying as immigrants in counties representing each of the three implementation levels. Risk was calculated as the number of ICE arrests per county per year divided by the estimated undocumented population in that county. The two county rates for each implementation level were averaged, and means were compared for each in 2017 and 2018.

While risk level was low overall, t-tests comparing average risk pre- and post-SB 54 for each implementation level (Figure 6) revealed a significant decrease in risk between 2017 and

2018 for counties with base-level implementation (t(3312)= 52.0464, p<0.001). For mid-level counties, there was no significant change (t(2988)=-1.5697, p=0.12). For high-level implementation counties, there was a significant increase in risk (t(3588)=-2.5512, p=0.01),

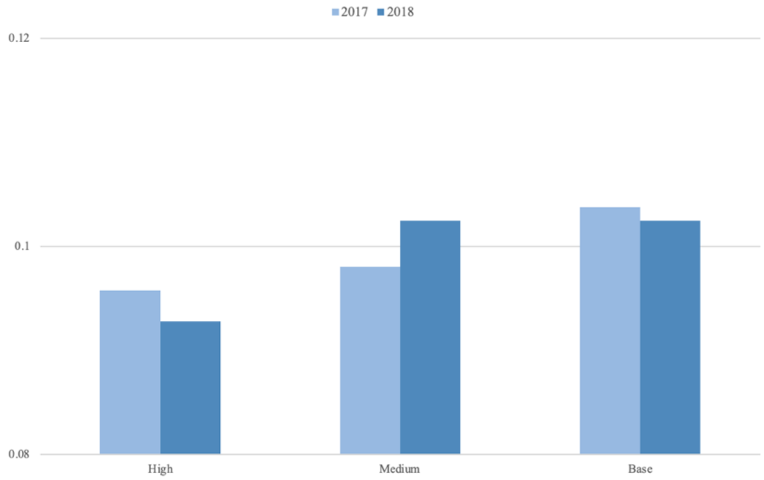
Figure 6. Risk of Contact by Implementation Level



The third and final assumption was that the implementation of this policy would result in increased willingness to engage with public entities such as health institutions. Avoidance of health care seeking is explicitly mentioned in SB 54 as a negative repercussion of coordination between LEAs and immigration authorities, and something the State legislature hoped to combat [99]. To investigate this claim, rates of CHIS participants identifying as immigrants and reporting forgoing needed care were compared in years 2017 and 2018 at each implementation level.

Rates of forgoing care were also relatively low overall in these counties. As shown in Figure 7 below, pre-SB 54 rates were highest in counties with base-level implementation and lowest in high-level implementation. T-tests found no significant change between 2017 and 2018 at base-level (t(3312)=1.03, p=0.3). Pre- and post-implementation averages did differ significantly for the other two groups, increasing for mid-level (t(2988)=-5.89, p<0.001) and decreasing for high-level (t(3588)=20.45, p<0.001).

Figure 7. Rate Forgo Care by Implementation Level

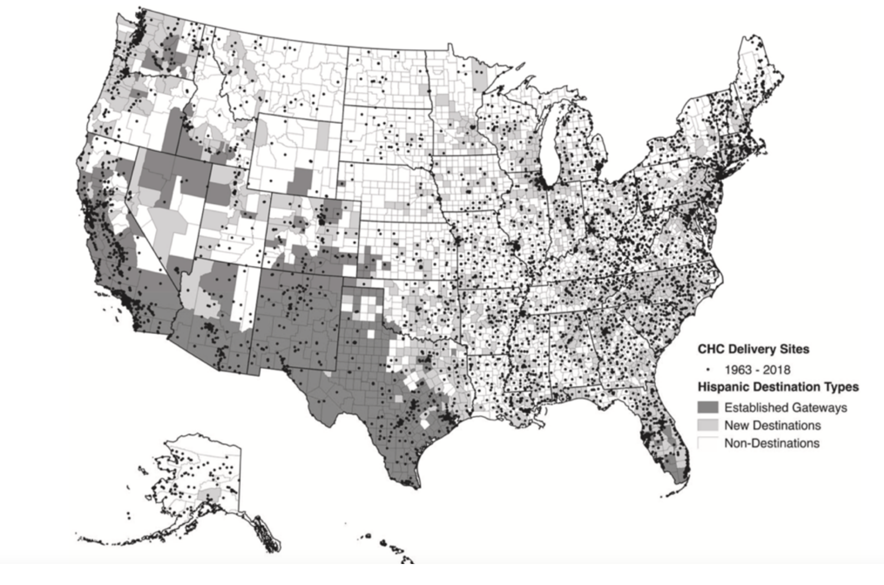


Measuring the relationship between risk of contact and forgoing care revealed only a weak positive correlation between deportation rates and forgoing needed medical care in this sample (r=0.06).

Chapter 6. Discussion

The purpose of this dissertation was to investigate barriers to health care access for immigrants in California. Results from both the quantitative analysis of barriers to care and the CPA demonstrated that the overall likelihood of forgoing care in this sample was relatively low. This may be due, in part, to the unique context in which participants live. California is known as an established gateway. Established gateways are locations in which immigrants have historically concentrated. In response, safety net infrastructure is more common in these areas [157]. Federally Qualified Health Centers, for example, are typically one of the only providers easily accessible to undocumented immigrants and are plentiful in metropolitan centers in the south and along the coast of California where the majority of immigrants in the state live [157]. Figure 8 from Parker et al. below demonstrates the ubiquity of established gateways and the accompanying FQHCs in California.

Figure 8. Established Gateways and Community Health Center Delivery Sights [157]



The additional resources, infrastructure, and diverse providers in this setting may act as protective factors against impediments to care such as medical discrimination and language barriers, as well as the negative impacts of county-level enforcement policies and the increase in health care avoidance typically associated with them.

Despite the relatively low likelihood of delaying or forgoing care overall, several meaningful subgroup differences were identified through an assessment of self-reported barriers from participants in the California Health Interview Survey. LCA was utilized to identify subgroups of participants with unique barrier endorsement patters. Fit indices calculated for this sample supported a three-class model, each with distinct groupings of barrier endorsement. Based on these patterns, the classes can be categorized into three levels: Low-, moderate-, and high-risk. Members assigned to class two, the low-risk category, had a low likelihood of reporting measured barriers to care across the spectrum. Members in the moderate-risk category, class one, had a similarly low likelihood of reporting measured barriers, with the exception of affordability, which was higher than either of the other two classes. The third and highest risk category was characterized by a high likelihood of endorsing multiple measured barriers to care, primarily availability, affordability, and insurance coverage. Endorsement of medical discrimination, language barriers, and administrative burdens were low overall, but were highest in class three. The majority of participants were assigned to either the low- (39%) or moderate-risk (44%) categories. 17% of the sample fell into the high-risk category.

Overall, affordability, availability, and insurance issues were the most common reasons for delaying or forgoing health care reported by participants, despite only 5% reporting having been without insurance coverage at any point in the last year. National polling supports this finding, indicating that lowering out-of-pocket expenses is the public's top healthcare priority, and roughly half of insured adults rate their insurance coverage as either fair or poor [158]. Timely access to care remains scarce in many states [53], and patients continue to face challenges finding primary or specialist providers accepting new patients [159]. Based on past and present evidence, prices being charged for care, provider flexibility, and the adequacy of coverage would all be consequential targets for intervention and would increase access to care across socio-demographic groups.

The main hypothesis of this analysis, that status, racial or ethnic group, and the interaction between the two would predict class membership, was assessed adjusting for sex, age, income, level of education, and number of years residing in the U.S. Findings from this sample only partially supported that theory. From the variables considered in this analysis, membership in the low-risk class was predicted solely by income, which was significantly higher than that of members in the moderate-risk class. Though not significant, members of the low-risk class had higher educational attainment on average, and had fewer non-naturalized members. Race or ethnicity was, in some cases, a meaningful predictor. Participants identifying as Asian were significantly more likely to be members of either the low- or high-risk classes than the moderate class. The combined influence of participant status and their race or ethnicity was not predictive of membership in any class, though insecurely statused Latinx identity was a nearly significant predictor for the high-risk class (p=0.053). However, membership the high-risk class was significantly predicted by insecure immigration status.

Those with insecure immigration statuses, as well as younger participants, were at particularly high-risk of reporting both general barriers and those more unique to status, providing evidence of the distinctive challenges to accessing care posed by non-health related legal designations. As discussed in Chapter 4.1., insecure status in this study could include undocumented individuals, DACA recipients, work or student visa holders, those with temporary protected status, or any other non-permanent legal status. Limited prior research has identified meaningful differences between these status groups. For example, a recent study of undocumented immigrants found that the majority experienced cost-, cultural-, and status-related barriers to health care access. However, DACA recipients were significantly less likely to report the same barriers as their completely undocumented peers [160]. Due to the inability to separate participants out in this sample, there may be undetected differences within the insecure category. Despite this limitation, studies support the finding that those with insecure statuses experience disproportionate barriers to care [160-162].

The non-significant findings on the interaction between legal status and racial or ethnic group suggest that although immigrants of color, particularly those with less secure statuses, are more likely to report experiencing certain impediments to care such as medical discrimination, language difficulties, and insurance-related barriers when taken individually, they are not grouping together based on patterns of response in this sample. There may be several reasons for this. Based on available CHIS survey items, seven access indicators could be created. Five of these seven were general barriers, such as affordability. If more barriers specific to experiences in which racial profiling commonly occurs, such as contact with immigration authorities, were included, the intersection of status and race or ethnicity may be a stronger predictor of class membership. There are also limitations to consider in the makeup of the sample. Due to small cell sizes, certain racial or ethnic could not be included in the analysis, potentially washing out meaningful differences between them. 83% of participants identified as either white or non-white Hispanic and those with insecure legal statuses made up only 19% of the immigrant participants in the sample, compared to 58% naturalized U.S. citizens. Larger proportions of other racial, ethnic, and status groups may yield different results.

The second portion of this study was a critical policy analysis of a major piece of state legislation focused on building trust with law enforcement in communities to alleviate avoidance of care, SB 54 or the California Values Act. Three distinct levels of county implementation were evaluated through a review of public responses of Sheriffs' offices, policies put in place, and subsequent compliance with those policies. Provisions of SB 54 covered five main domains with the aim of cutting off local funds and personnel from federal enforcement efforts: daily operations, retainers, task force participation, reporting, and activities within correctional facilities. Despite the ambition of the legislation, uniform adoption was not achieved, resulting in a patchwork of county and municipal policies.

Inconsistencies such as these may inhibit the documented health benefits of inclusive immigration policies [163;164]. State-level policies are a promising point of structural intervention, but they are nested within the context of both federal and local priorities [165]. Although counties and municipalities have limited jurisdiction to create their own immigration policies, they remain influential actors with discretion in their level of compliance with state policy [165]. To date, research on state and local differences in immigration policy enactment has focused on states with restrictive policies and local efforts to combat the negative effects of those policies on their immigrant community members. Our knowledge of inclusive state policies with unreceptive local entities, on the other hand, remains extremely limited [165].

In the case of SB 54, misalignment in county-level implementation persists due to both ambiguities in the original legislation and limitations on the state's ability to actively work against these federal and local priorities. The first of these ambiguities was honoring detainers.

As previously discussed, detainers are request from ICE to LEAs for them to hold, transfer, or share information about an individual in their custody. Although SB 54 attempted to bar LEAs from honoring ICE requests to hold, notify, and transfer non-violent offenders, compliance with the spirit of this provision was largely dependent on the will of county sheriffs. As seen in the base-level implementation counties, restrictions on release notifications were circumvented by LEAs publicly publishing all inmate release dates. ICE was only limited from moving freely in correctional facilities in one of the evaluated counties, and local law enforcement databases, including license plate tracking information, were still widely accessible. Furthermore, evidence from locations such as Orange County suggest certain LEAs continued to arrest and hold individuals on immigration-related offenses in violation of the law [147]. As of 2019, over 30 LEAs in California were still cooperating with immigration agents in violation of SB 54 [166].

SB 54 regulations on joint task force participation were similarly vague, allowing continued local cooperation with immigration authorities. In an opposition letter from Orange County's Tustin City to the California State Senate, they highlight this ambiguity. The law states that the primary purpose of a joint task force cannot be immigration-related, but provides no explanation on how "primary purpose" is determined (Appendix B, page 69). Clarifications, detailed reporting guidelines, and restrictions were included in the updated policy handbooks in counties with mid- and high-level implementation, but remained undefined in base-level counties. Though reports on task force activities, detainers, and other collaborative actions were required annually, the law established no monitoring system for daily activities or penalties for noncompliance. These loopholes resulted in some counties meeting only base compliance or, in some cases, noncompliance with the law, while others went beyond what was required to disengage from federal immigration authorities.

A recent qualitative study in California on implementation of inclusive state-level immigration policies supports these findings. Participants from community-based organizations (CBOs) in rural counties with high proportions of Latinx immigrants in the San Joaquin and Imperial Valleys reported chronic noncompliance with inclusive policies by local decision-makers, including ongoing collaboration with ICE [165]. In spite of state policies, staff noted difficulty working with limited resources within hostile local climates, reinforcing barriers to care for their clients. This, along with federal policy, led many of their clients to disengage from public programs such as Medi-Cal and SNAP [165].

Although certain clarifications were issued by the Attorney General's office in the period following enactment, SB 54 has not been amended from its original form since 2018. Potential reforms could be made to help standardize implementation. First, stronger provisions to address loopholes should be put in place, particularly regarding information sharing. Orange and San Diego County's policy of posting all release dates, including those of individuals with ICE detainers, undermines the effectiveness of SB 54 and reforms could be explored to limit this kind of information sharing. Additionally, further steps should be taken to limit immigration enforcement from scraping LEA databases for personal information on known or suspected immigrants.

An amended SB 54 could limit immigration enforcement's access to correctional facilities, where inmate ability to refuse to consent to an interview is questionable. Stricter task force guidelines and increased transparency, particularly in counties publicly opposed to SB 54, would help further standardize implementation. Finally, compliance monitoring should go beyond a yearly report on county transfers to ICE, and should include a more thorough investigation of ground-level practices with set penalties for non-compliance [165]. These additional protections have been implemented in some counties, like San Francisco, largely due to county ordinances. In the absence of state-level amendments, communities can take action to limit enforcement collaboration by their local officers.

The central concept that SB 54 was built around was that decreased local participation with federal immigration enforcement would increase trust in police and other state governmental entities, and subsequently improve community health and well-being. The quantitative supplement to this policy analysis interrogating this assumption provided mixed results. Risk of contact with ICE, as estimated by county-level arrests relative to the estimated undocumented population in that area, significantly decreased between 2017 and 2018 in counties with the lowest level of SB 54 implementation. In high-implementation counties, risk significantly increased. This may suggest that the presence of federal agents increased in counties committed to expanding protections for immigrants, redirecting those resources away from base-level counties who in many cases publicly proclaimed their intention to continue collaborating with ICE to the fullest extent of the law or, in some cases, in violation of SB 54. This serves as a reminder to legislators to consider not only the benefits of their policies, but also potential unintended consequences.

Pre- and post-implementation rates of delayed or forgone care among CHIS participants were highest overall in base-level counties, followed by mid-level counties, and lowest in high-level counties. This rate did not change significantly between 2017 and 2018 in base-level counties, but increased significantly in mid-level counties and decreased significantly in high implementation counties. Furthermore, risk of contact with immigration enforcement and forgoing care were only weakly correlated in this sample. The incongruent trends in high-level implementation locations wherein rates of forgoing care decreased even as risk of contact with ICE increased could indicate that more welcoming policy environments created by the counties were more influential on feelings of safety in service seeking than actual ICE actions.

However, there are both substantive and statistical limitations to consider. Several counties of varying implementation levels in this study are in close proximity to one another. Participants could, for example, work in Orange County and live in LA County. The most recent available data on commuting patterns in California indicated that the counties included in this study were among the highest in the state for number of cross-county commuters [167]. Participants in this situation could be experiencing wildly different enforcement environments in their daily lives and their health seeking behaviors may be influenced by legal pressures outside of their county of residence.

Furthermore, independent monitoring has found potentially important differences in implementation at lower levels than the county. In some instances, not all departments within a county have written policies compliant with guidance from the County Sheriff [148]. This discrepancy could lead law enforcement officers within those departments to inadvertently violate SB 54 guidelines. Sub-county level differences in implementation are beyond the scope of this dissertation, but may be important in future assessments of more localized experiences with LEAs. Finally, this evaluation assumes parity in written policy and actions. In reality, the limited qualitative evidence available suggests differences in certain parts of the state between LEA guidelines and ground-level actions in the community [165].

Statistical limitations must also be considered. Only two years are being included in this analysis and any increases or decreases seen may be due to typical fluctuation. Additionally, risk of contact in this scenario relies on a proxy variable calculated from arrest rates. Though this measure has been used previously [165], it may not accurately reflect the actual or perceived threat of deportation. Future studies should ask participants directly whether fear of immigration authorities influenced their willingness to seek care.

Chapter 7. Conclusion

In a 2021 international study comparing 11 high-income health care systems based on 71 performance measures covering access to care, processing, administrative efficiency, equity, and health outcomes, the United States ranked last overall [168]. Though this burdensome system presents challenges to most in one way or another, subpopulations facing structural oppression are even less likely to have the social and financial capital needed to navigate it [54]. The current study focused on the experiences of immigrants, who previous research has found to be further hampered by a combination of state and federal legal restrictions, institutional biases, and safety concerns when interacting with public entities [6, 2, 4, 60]. This danger may be compounded by racial profiling, leading to spill over in which non-immigrants sharing a perceived racial or ethnic designation experience “vicarious illegality” [6; 12].

It is important to recognize that immigrants and other individuals with these lived experiences have been talking about their differential treatment within the health care system for decades. However, there are gaps in the existing peer-reviewed research specifically investigating institutional and policy-level barriers to care at the intersection of immigration status and race or ethnicity [95]. This study attempted to address several of these gaps. The ongoing political debate between a single-payer and private health system that has largely defined the national conversation in recent decades reflects the idea that coverage will eliminate disproportionate access to care. While coverage is undoubtedly a crucial piece, people experience a broader web of distinct but interconnected challenges to service utilization. Despite only an estimated 8% of uninsured individuals in the U.S., costs set by health care facilities are too high, even for the insured [16, 35, 36, 38]. Outside of cost and coverage, geographically concentrated health care infrastructure and access to transportation [43-45], ability to be seen in a timely manner [48-50], and administrative challenges to participation all have the ability to significantly impact health and well-being [53, 54]. Rather than focusing on a single aspect of access, this study took a variety of barriers to care into consideration simultaneously to allow comparisons of their prevalence. It also utilized direct reports from participants on the salient obstacles to health care participation they faced, rather than relying on common proxy variables, such as annual household income.

Based in the Public Health Critical Race framework, this study also compared a spectrum of legal designations and assessed how negative experiences within the healthcare system may be uniquely shaped depending on immigration status and racial or ethnic group. Finally, this study focused on the role of institutional practices and policies in either facilitating or inhibiting service seeking rather than individual beliefs or behaviors. The CPA provided context for the immigration policy environment CHIS respondents were living in during the period of data collection, bringing an additional dimension to the observed trends in service seeking.

Several hypotheses were tested in this study, the first being that there were subgroups among participants with distinct patterns of access barrier endorsement. This hypothesis was supported. Three subgroups, or classes, were identified through the LCA, each with unique characteristics. Based on the likelihood of endorsing multiple barriers, the three classes were categorized as low, moderate, and high-risk, with high-risk class members exhibiting the strongest and most varied barrier endorsement. The second hypothesis was that membership in these classes would be significantly predicted by three factors: a) immigration status, b) race or ethnicity, and c) the interaction between the two. Hypothesis 2a was partially supported.

Membership in class three, the high-risk class, was significantly predicted by insecure immigration status. However, membership in classes one and two were not predicted by immigration status and no significant differences were found between naturalized citizens and green card holders. Hypothesis 2b was similarly partially supported. Membership in classes two and three, the low- and high-risk classes, were significantly predicted by Asian identity compared with white participants. Participants who identified as Hispanic/Latinx, on the other hand, were not significantly more likely to fall into any of the classes. Hypothesis 2c was rejected. Among these participants, the interaction between legal status and race or ethnicity did not meaningfully predict class membership beyond the effect of legal status and race or ethnicity alone.

In the CPA, two hypotheses theorized by the authors of California's SB 54 were tested. Given inconsistent implementation of SB 54, the first hypothesis tested was that participants in counties with more stringent implementation would have a lower risk of contact with federal immigration authorities. Based on a preliminary quantitative assessment, this hypothesis was rejected. Counties with higher implementation levels actually showed an increased risk of contact with immigration enforcement post-SB 54, while counties with base-level implementation significantly decreased their rate of contact. The second hypothesis, that higher-level implementation would result in increased trust in public institutions and decreased rates of forgoing medical care, was partially supported. Rates of delaying or forgoing care significantly decreased only in counties with high-level implementation of SB 54.

The results of this study may have a number of implications for policy and practice. Although the rate of delaying or forgoing needed care was low overall in this sample, likely influenced by California's progressive immigration policies and expansive health and social resources, common barriers to care persisted. The prevalence of reporting issues around affordability, provider availability, and insufficient insurance coverage suggest that California could increase service utilization by implementing programs and policies that target these aspects of accessibility. Since data for this study was collected, California has implemented the right to timely care, which requires providers to see patients for non-urgent appointments within 10 days. Laws such as this have increased the availability of care. Additional policies focused on affordability and insurance coverage would likely build upon this progress.

Lower levels of care seeking among immigrants in the U.S. are sometimes attributed to better overall health [91, 92]. However, this theory has not been sufficiently supported and often relies on low-quality data that excludes the most vulnerable [93-95]. The current study found no significant differences between those reporting not needing health care based on citizenship status, providing further evidence that immigrants as a whole are not forgoing services because they are healthier or do not believe they require preventative care. On the contrary, despite this lack of difference in health needs, 17% of the current sample fell into the high-risk class and were more likely to experience institutional and systemic challenges to health care access across the spectrum, from broader aspects such as affordability to more status-specific factors like language barriers and medical discrimination. Membership in this high-risk class was significantly predicted by insecure immigration status, as well as identifying as Asian, and being younger. Program administrators and policymakers in California should build relationships with community stakeholders to understand the unique experiences of these subgroups and tailor interventions to their needs.

The critical policy analysis of SB 54 revealed county-level inconsistencies in implementation of the law that were undermining the goals of the legislation. The primary objective of CPA is to interrogate the gap between policy-in-intention and policy-in-action. California legislators intended for SB 54 to lower the risk of contact with federal immigration authorities across the state, which in turn, they theorized, would increase trust in public institutions and belief in the ability to safely seek health care. In reality, counties retained discretion in their level of compliance with the law, leading to a patchwork of law enforcement policies across the state. Some locations, such as Orange County, continued to collaborate with ICE to the greatest extent, and in some cases in violation of, the law. Others, like San Francisco County, went well beyond standard compliance in providing protections for their immigrant community members. California lawmakers should consider amending SB 54 to clarify vague language and close the loopholes low-implementation counties are using in order to continue working with ICE. Furthermore, the state should enhance compliance monitoring and establish penalties for jurisdictions failing to follow the guidelines established by SB 54 in the daily enforcement activities of their officers. Local accountability and consistent implementation would create a more equitable experience of the law for communities across the state.

Legislators in California should also consider the unintended consequences of their policies. While findings from the quantitative assessment of ICE arrest rates and concurrent trends in forgoing care provided preliminary evidence that welcoming local policies may be protective against more hostile national policies, risk of contact with federal immigration authorities significantly increased in counties that adopted the most stringent SB 54 guidelines. Policymakers must consider potential risk of harm in situations where local, state, and national priorities conflict with one another, and how that harm can be mitigated. When drafting legislation, stakeholders in the community should be tapped to provide their perspectives and local expertise to the process in order to better understand how interconnected policies are experienced by members of the communities they are attempting to support.

There are a number of limitations to be considered when interpreting the findings of this study. In addition to limitations laid out in *Chapter 6. Discussion*, one of the most salient is external validity. California is a highly specific policy environment, both in terms of health care and immigration, as well as demographic makeup, and thus the experiences of immigrants in this context may not be generalizable to the experiences of individuals in other states. Despite its history, county-level differences, and continued presence of ICE and Border Patrol agents, California has emerged as one of the most progressive state policy environments on immigration in the country. That may be contributing to low rates of forgoing care across sociodemographic groups. Investigating this topic within a setting like Arizona at the opposite end of the spectrum may reveal considerably different findings. Finally, number of participants with less secure statuses and the racial and ethnic diversity of each in this sample was low, limiting the ability to detect meaningful differences between groups. Future studies should include larger and more diverse sample sizes. Future research including barriers to care more salient to specific status and racial or ethnic groups, such as risk of police contact, may show more distinct differences between them.

Immigrants make up a significant and growing portion of the United States population [1], and it is critical that the policies and institutional practices limiting service utilization and contributing to negative health outcomes be identified and addressed. A goal of the current study was to center these higher-level factors and the deficits of the health care system rather than the deficits of individuals. It is critical to shift away from framing identities, such as immigrant or person of color, as “risk factors” for poor health outcomes. Rather, individuals and communities that hold these identities are at risk of inequitable treatment and resource access, which naturally contributes to poorer health outcomes.

Since the passing of the Administrative Procedure Act in 1946, the government has been required to maintain a certain level of transparency in agency actions and rulemaking. This paved the way for subsequent legislation that created the system we have today, wherein federal, state, and local agencies must provide public notices, hearings, and other activities that allow stakeholder engagement and community consultation in the rulemaking process and program administration [169]. Although the proportion of CHIS participants in the pooled sample reporting delaying or forgoing care in the past year was small, 89% of those who did endorsed doing so due to one or more of the institutional or structural barriers to care measured in this study. The Social Determinants of Health framework asserts that any action taken to reduce health disparities must engage the responsibilities of governing bodies [100]. Individual and community-level behavioral health interventions that encourage care seeking are important aspects of public health. However, their impact may be limited if the system itself is designed to exclude them. Much of the work around health equity will be done at the local level, but institutional commitment and policy change are necessary to implementing effective and sustainable solutions.

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