**Inequalities in Access to Dermatologic Healthcare in Hispanic/Latino(a) Communities**

by

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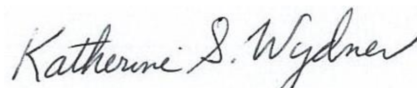

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## Abstract

In the healthcare field, especially for people of minorities, some issues prevent patients from getting the care they need and providers from providing that care. This paper aims to identify the issues of diversity among patients and providers through the study of scholarly articles and personal statements from interviews of 10 Latino(a) participants that provide evidence of inequities. This analysis organizes statistics presented by these articles in the form of tables documenting many issues that impact people of minority groups as well as the lack of diversity among healthcare professionals. Through those supporting statistics and identification of issues, possible solutions and continued awareness of these issues will be discussed. Solutions include increasing diversity in healthcare through education, changing the current U.S. Healthcare system to a more socialist approach that most European countries have adopted, creating more inclusive workplaces, tackling the issues of racial injustice in society, and promoting programs that could help people of minority and low-income communities. These solutions and analyses will then be connected with the results of interviews, presented in tables and graphs that despite a small sample size, will show clear inequalities in access to dermatologic healthcare by Latino (a) from various salary ranges.

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**Introduction**

In the United States, there are a range of causes of inequality for Hispanics/Latinos(a) in dermatologic healthcare. These inequalities include expensive treatments, treatments at times not covered by insurance, few Hispanic dermatologists, and a lack of dermatologic practices in Hispanic communities. These inequities are in tandem with many problems in healthcare that are already known to the general public, such as high financial costs, racial discrimination, and lack of provided health insurance. Delving deep into this subject is due partly to personal experience. It was challenging to find a dermatologist to accept my insurance, and I have had to travel from my home community to other counties to find a practice that would accept my insurance, or else I would have to pay out of pocket hundreds of dollars just for a checkup. This process was not friendly from my personal experience, and even when I found a dermatologist, there seemed to be a racial disconnect. They could not see through my eyes the problems that someone of a different ethnicity could go through.

From a patient perspective, I have not had good experiences, and I went to research if others have gone through the same sort of ordeal. When I say people like me, I am referring to people of Hispanic and Latino(a) origin. However, this thesis will primarily focus on Hispanic communities and providers. These inequalities are systemic issues in dermatologic healthcare, partly caused by a lack of access to services in this field for people of Hispanic culture. Also, according to Mpyisi et al. (2023), dermatology is the second least diverse medical specialty in the United States. This may seem like a statistic that has little practical value, but this low diversity of medical specialists in the field could lead to the undermining of patient care and an increase of racial behaviors that create an unsatisfactory environment. There are many causes that contribute to this inequity and low diversity, and I believe it is important to investigate these

causes in order to address issues pertaining to dermatology and work toward a future that will provide equal treatment to future patients with improved healthcare overall. That is why I think it is important, not just for me, but to spread awareness to others who have had similar experiences.

Before I go any further, I want to explain the distinction between Latino(a), Hispanic, and Latinx. Latino is a term used to ethnically describe a group of people that are from or descendants of countries in Latin America. This includes Brazil, Mexico, Honduras, Argentina, Dominican Republic, etc. As for Hispanic, this revolves around the term for people who are from or descendants of people in Spanish speaking countries. This excludes people from countries like Brazil and Guyana since their main language is not Spanish and instead Portuguese and English respectively. For Latino and Hispanics, I will use them throughout my presentation as if they are the same term. As for Latinx, it is a term used for a group of people who use a form of Spanish without gendered words.

There is much written about this subject, but a compiled essay of possible inequalities of Hispanic Americans is something I wanted to dig into. For example, according to an article by Funk and Lopez (2022), Hispanic Americans are less likely than other Americans to have health insurance and receive preventable medical care. Also, higher levels of poverty contribute to disparate health outcomes for Hispanics. According to an article by Perreira et al. (2021), the United States is a wealthy country, but a good portion of its citizens are uninsured. In addition, there is a lack of sick leave and public transportation services for minorities and high insurance rates for Hispanic children, making it difficult for them to get examinations (Perreira et al. 2021).

Even though these factors pertain generally to healthcare and not specifically the field of dermatology, lack of health insurance, lack of preventable medical care, and high levels of poverty seem to affect dermatology significantly. In a paper by Wilson et al. (2021), it is again

mentioned that dermatology is one of the least racially diverse medical specialties, which causes problems in providing race-concordant visits. A race-concordant visit means getting care from a provider of the same race, which can boost patient care and safety while reducing racial stereotypes. Wilson et al. (2021) provide solutions to this, which include displays of wall art or statements that show broad ranges of minority cultural differences, communication techniques that help physicians understand racial patient perspectives, and racial diversity statements that lessen anxiety and foster patient communication. According to the article by Mypyisi et al. (2023), this underrepresentation is put on full display through the statistic that Hispanic dermatologists make up only 4.2% of all dermatologists compared to 19% of Hispanics in the general population. This lack of diversity impedes equal healthcare for minorities and underrepresented communities. With these research findings, important questions that should be kept in mind are what are the causes of inequity in access to dermatology in healthcare for Hispanics, and what are possible solutions that could be made?

**Methods**

This thesis employs two approaches to determine everyday inequalities to dermatologic healthcare and general healthcare as in Hispanic communities. First, analysis of academic sources/scholarly literature provides a credible foundation for establishing context and evidence for Hispanic lack of access to healthcare. Evidence for inequalities is divided into five sections: comparison of US Healthcare to other countries, the expensive nature of dermatological treatments, lack of insurance among Latino(a) patients, underrepresentation of Hispanics as health professionals through causes such as rising tuition, and cultural/systemic barriers for access to dermatological healthcare.

Second, a survey/questionnaire was implemented to interview family members and Latino(a) colleagues through questions designed to clarify specific challenges that Latino(a)s may face in the healthcare field, providing insight on issues that directly correlate with the provided section information. Each participant was of Latino(a) descent and some were either purely Spanish speaking or bilingual. Participants were asked to state their country of origin and they had the option to personally reveal income as well as their documented status. Another option was whether they were comfortable with sharing their name for the interview study. The answers were recorded by the participants themselves and when participants wrote in Spanish, it was translated to English.

The interview questions consisted of seven questions that ranged from insured status to provider healthcare experience. The specific questions that were asked were:

1. Are you currently insured?
2. Have you ever felt discriminated against in the medical setting/dermatology setting?
3. Have you ever had to forgo treatment due to high costs in dermatological healthcare and/or general healthcare?
4. Do you currently see a dermatologist - if yes, how has your experience been?
5. Were there any cultural or language barriers to your care?
6. What is your opinion on the state of not just dermatological care, but overall health care?
7. Is your provider of the same ethnic/racial background?

Question 1 could be answered yes or no, but it also gave participants the chance to provide a reason why they were insured or uninsured. Also, this question generated data on the

percentage of participants that did not have insurance for dermatology or general healthcare. Questions 2, 4, and 6 allowed personalized responses that depended on the participants' experience. They also provided important information by showing patterns of inequalities with the participants' responses. Questions 3 and 7 were constructed to reveal both personal and matter-of-fact responses.

Answers were formed in table format, and each table represented one participant's answer. The tables totaled to ten with accompanied ethnic background. After participants' responses were organized into tables, figures were formed that showed percentages of whether or not a participant faced an inequality or not. The inequalities included discrimination, insured or not insured, experienced cultural/language barriers, negative/positive outlook to dermatologic/medical care, same racial/ethnic provider or not, and high or low cost treatments. The tables were also organized as bar graphs to visually show percentage differences. A hypothesis was also formed to test the survey/questionnaire. It was hypothesized that there were going to be clear inequalities and complaints made by the participants that were going to support the inequalities mentioned in the literature analysis of the thesis.

## Results/Discussion

### Section 1- Healthcare in the United States in Comparison to Other Countries

To understand how there could be inequalities to dermatological healthcare for a group like Latino(a)s, the healthcare system of the United States has to be analyzed and compared to other countries to determine whether this is a regional issue or a global issue. First, it is good to understand the different types of healthcare. Based on the article by Dwan (2020), there are three

types of healthcare systems in developed countries in the world. One of them is the Nationalized Health Care Systems, which is what the United Kingdom and most EU countries go under (Dwan, 2020). This system's goal is to essentially provide care to everyone no matter their financial status (Dwan, 2020). It does this through a two tiered system where there is the government running the public healthcare system for most people and the option to purchase any private care options that are known here in the United States (Dwan, 2020). The second healthcare system is a single payer system which is used by countries like Canada where there is supposed to be free healthcare to all (Dwan, 2020). Also, this is more of a socialized medical care system where development of drugs is not one of its main focuses and is left mostly to private companies like those in the United States; this system, in a way, then "reaps the benefits" and provides medicines to the public (Dwan, 2020).

The third are employer-provided and private insurance systems that are found only in the United States (Dwan, 2020). The United States' healthcare system involves a mixture of employer-provided health insurance and then private insurance and public insurance (Dwan, 2020). Also, this is where Medicaid and Medicare come in. Based on a website by MetLife, there are different insurance companies that offer plans based on your needs; they all offer different coverages and require different criteria to qualify. The four different types of health insurance are HMO, PPO, EPO, and POS ("Types of Health Insurance," n.d.).

Based on the article by Keisler-Starkey and Bunch (2020), there are also different levels to private and public insurance that are unique to the United States (2020). For instance, private insurance includes employment-based which is through an employer, direct purchase which is directly from an insurance company, and TRICARE which is the Civilian Health and Medical Program of the Uniformed Services (Keisler-Starkey & Bunch, 2020). For public insurance, it is

Medicare which is federal and for people over 65 years of age and older and with people with long-term disabilities, Medicaid which is for people who are low-income and only through starters that are under Children's Health Insurance Program (CHIP) and with Basic Health programs, and then CHAMPVA and VA which is for Veterans (Keisler-Starkey & Bunch, 2020).

With respect to Hispanic children under 19, 8.6% were uninsured while for adults between 19 to 64, a massive 25.1 percent or ¼ Hispanic adults were uninsured during 2021 (Keisler-Starkey & Bunch, 2020). Compared to other races, the uninsured percentages for white non-Hispanic working age adults were 7.5%, 12.7% for Black, and 7.7% for Asians, (Keisler-Starkey & Bunch, 2020). The gap in coverage among working age adults for Hispanics is huge for any race and there is a significant gap for children under 19, where it is 3.4% for white non-Hispanic, 4.3% for Black, and 4.6% for Asian (Keisler-Starkey & Bunch, 2020). The reason for this gap of coverage for Hispanics compared to other races may be because of non-expanded states under the Affordable Care Act. There is a program called The Patient Protection and Affordable Care Act (ACA) that expands health insurance to people who fall under the poverty line (Keisler-Starkey & Bunch, 2020). There are 14 states as of 2021 that have not expanded Medicaid under their health insurance, which can affect children who fall under the poverty ratio (Keisler-Starkey & Bunch, 2020). Furthermore, this can affect Hispanics that are living in these states who are not meeting their financial needs. For Hispanic adults, an understanding of the inequalities of healthcare is needed to grasp the almost ¼ uninsured gap (Keisler-Starkey & Bunch, 2020).

Based on the different types of healthcare systems, it is apparent why there are inequalities to the system to not just Latinos but for marginalized groups of people of low socioeconomic status and minorities in general. It is due to the fact that the United States as a

healthcare system does not have an implementation where people of all groups can have healthcare. You either accept the private or public, and if you do not fit in the criteria, you are left uninsured. However, there is an act called the Affordable Care Act, originally called Obamacare, which would attempt to give healthcare to all. Based on the article by Shwe (2019), there are many limitations even with the ACA, and it mainly is because of political and state reasons. A total of 31 million adults in the United States are uninsured due to how every state has the option to not implement the ACA (Shwe et al., 2019). The article by Donohue (2022) backs this statement, where only 38 states and Washington, DC have enacted the ACA in the year 2022. From the article by Keisler-Starkey & Bunch (2020), it was mentioned that there were 14 states that have not enacted the ACA, which means there was at least a jump of two more states that have expanded coverage. These states are Texas, Kansas, Wyoming, Wisconsin, Tennessee, Mississippi, Alabama, Georgia, South Carolina, Florida, Wisconsin, South Dakota, and North Carolina as of 2022. However, this leaves 10 other states filled with millions of people at risk for being uninsured.

Based on the article Gaffney and McCormick (2017), the ACA was enacted in 2010 to combat lack of coverage to healthcare access. The issue with this is how it builds on an existing faulty system instead of already workable examples from other countries, such as tiered one and two healthcare systems from countries like the UK and in Europe. These countries have universal programs that offer free healthcare to all of their citizens while the ACA wanted to build upon a financing system that the U.S. has (Gaffney & McCormick, 2017). Previously insurance only applied to very poor people like children, disabled, and pregnant women while under ACA it applies to all citizens with incomes up to 138% of federal poverty level based on the article (Gaffney & McCormick, 2017). The second step ACA tried to implement was to make

every citizen get private insurance or pay a fine (Gaffney & McCormick, 2017). With these two things, many gained insurance, such as 22 million people. However, there are still 28 million people uninsured as projected in 2024 (Gaffney & McCormick, 2017). Hispanics and Blacks were still showing racial disparities whereas in 2017 Hispanics' percentage of being uninsured was 27.7% and Blacks were 14.4% (Gaffney & McCormick, 2017). Also, undocumented immigrants were excluded from ACA which can account for the percentage of Hispanics. Even with the targeting of the main issues of U.S. healthcare, it still ultimately leads up to the high costs of healthcare that leads to families being unable to afford medication or emergency services. Twenty-three percent of non-elderly adults skipped medical visits and 19% were unable to fill a prescription or go through treatments because of costs (Gaffney & McCormick, 2017). Especially low income patients, where 44.8% of non-elderly low income adults had medical needs that were unmet because of high costs (Gaffney & McCormick, 2017). This is further worsened where in 2012 there was a Supreme Court decision 2 years after the ACA was enacted where it allowed states to opt out of the expansion of Medicaid. As stated previously, only 10 states remain to not accept this expansion, and based on a study, non-expanded states compared to expanded states had less improvement in healthcare cover and use overall which led to thousands of deaths annually (Gaffney & McCormick, 2017). Lastly, even in expanded states, doctors and physicians can opt out of Medicaid, which happens in dermatology (Gaffney & McCormick, 2017). There is also evidence that even when physicians allow Medicaid, there are longer wait times, unequal treatment, and segregation of care by race compared to people who have private plans (Gaffney & McCormick, 2017).

*Section 1- Solutions for Healthcare in the United States in Comparison to Other Countries*

With the comparison of the U.S. healthcare system with healthcare systems in other countries, the possible solution to this system may seem obvious. Instead of a privatized system, the U.S. could adopt a universal healthcare system that has shown its success with serving other countries' citizens. However, universal healthcare itself has drawbacks, such as when it serves a large geographic area, increased taxes, and long wait times (Zieff et al., 2020). There is also a sizable audience in the US who are opposed to this idea, who see this universal, government sponsored system as applying socialist or communist ideals to a democratic government. Also, the same audience may see this change as “government meddling” (Zieff et al., 2020).

Despite the points mentioned above that are valid concerns and barriers, the current US system does not seem to be working and leaves about 10% of the population uninsured. There has to be at least a push to a more idealized healthcare that gives everyone access. As for the large geographic location issue, the majority of western countries that have universal healthcare are less ethnically diverse and are smaller than the U.S (Zieff et al., 2020). The solution to this would be to put in the money to develop technology and infrastructure to provide healthcare to a higher percentage of minorities as well as the overall population. These costs of developing infrastructure would be at all levels of government from federal, state, local and all levels of providers such as hospital, out-patient clinic, and pharmacy (Zieff et al., 2020). Also, these costs would have to cover other medical fields like dental and vision (Zieff et al., 2020). These costs could be mitigated through taxes, and a workable proposal is a 7.5% payroll tax and a 4% income tax on every American citizen with the percentages increasing for citizens with higher income (Zieff et al., 2020). There would also be more costs other than taxes to pull this off, yet a country with the highest economy would have to make sacrifices in other sectors to provide more beneficial care to its citizens.

The other issue is wait time. Canada is a country that has had its complaints with wait times, with people on a waiting list for 1,040,791 procedures in 2017 and average wait time for surgeries - such as arthroplasty surgery - being 20-52 weeks (Zieff et al., 2020). However, it could be argued that at least future expected care is better than no care at all due to financial constraints. Latino(a)s, and especially low socioeconomic Latino(a)s, can benefit from this if they do not meet the requirement to be insured. Other benefits for this pursuing of universal care is the possibility of it being a highly efficient system to combat preventative diseases. These diseases include cardiovascular disease, diabetes, and obesity which are all preventable diseases that are on the rise and are epidemics to Hispanics and minorities without suitable health insurance (Zieff et al., 2020). With universal care, patients from low socioeconomic groups can access the care they need to combat early risks to these diseases and essentially increase lifespan of patients (Zieff et al., 2020). Even though these solutions are costly, the limiting of risks and ultimate improvement of the current system is an exchange for the betterment of the uninsured.

## Section 2- Expensive Dermatological and Healthcare Treatments

Expensive treatments are more prevalent in dermatology than in seemingly any other aspects of healthcare aside from lifesaving procedures (Ariens et al., 2019). Our skin is the largest organ in the body, and covers almost every part of ourselves that we can see on the outside. However, most treatments for the skin are seen as cosmetic rather than medically necessary by health insurance companies (Ariens et al., 2019). This ideology is dangerous and foreboding, as this type of attitude by insurance companies and doctors can harm or create hardship for patients. Many patients may not have the financial means to cover treatment or

medication for a skin disease, which if left untreated, can progress into a serious and life-threatening ailment. This in turn, can grow into an even bigger financial burden.

Examples of expensive dermatology treatments include treatments for melanoma, hidradenitis suppurativa, and vitiligo (Espinosa & Lio, 2019). This is only a handful of disorders and diseases that many patients could have, yet if patients cannot pay for treatments through insurance or out of pocket, their very life or day-to-day activities can be even more hindered. Also, over time disorders can progress and lead to death. This is especially true of diseases like melanoma, which negatively affects people of color and Hispanic background in terms of late diagnosis (Espinosa & Lio, 2019). Based on the article by Gög̃ebakan et al., the cost of treatments for melanoma from their study of patients with stage 4 melanoma showed that they had to pay $77,222 per year (2021). This is an increase from $55,479.99 in 2004 (Gög̃ebakan et al., 2021). For stage 1 it is under $10,000 in costs, stage 2 is around $20,000, and stage 3 is around $50,000. These expenses incurred through therapies like inhibitor therapies are typical for melanoma patients and patients that are in the Medicare population of 65 years and older (Gög̃ebakan et al., 2021).

Furthermore, added to the financial burden is the fact that survival of patients with melanoma is lower in Hispanics than Caucasians with an 81% survival rate for Hispanics compared to a 90% survival rate to Caucasians (Espinosa & Lio, 2019). This may be due to the fact that Hispanic populations are 20% less likely to perform skin examinations and patients who spoke only Spanish were less likely to report skin abnormalities compared to patients that spoke only English (Espinosa & Lio, 2019). This is another diversity issue in the field of dermatology - one that needs to be addressed in terms of cost and making patients feel included so they can speak about any issues that may arrive.

According to Tsentemeidou et al (2022), treatment for hidradenitis is costly, averaging to $258 to $8,078. Also, the U.S. was leading in costs per patient annually, outpatient annually, inpatient annually, and emergency based on Figure 1 in the article (Tsentemeidou et al., 2022). Based on Figure 1, cost for annual inpatient treatment was $25,000 in 2019, mean annual per patient was under around $20,000 in 2018, and for emergency it was around $1,000 in 2019 (2022). Based on the article by Espinosa & Lio, hidradenitis is an inflammatory condition that affects Hispanic patients the most out of other groups in the U.S. population (2019). The main cause of this disease is lack of a healthy diet and lack of resources to obtain those healthy foods (Espinosa & Lio, 2019). This especially affects Hispanic populations because a significant percentage of Hispanics are of low socioeconomic status, and cannot afford healthy diets. Also, Hispanics are more prone to be obese than members of the general population due to low income and lack of access in their neighborhood for exercise (Espinosa & Lio, 2019).

According to Blundell et al. (2021), “people of color are disproportionately impacted by vitiligo”. This is due to the condition being more apparent in darker skin colors as the blotches of the vitiligo-affected skin are more noticeable. Because of this, vitiligo comes with side effects such as affecting a person of color’s quality of life with increased stigmatization due to being in a marginal group (Blundell et al., 2021). With these worrying side effects, vitiligo should be treated with more care among Hispanics that are already marginalized. However, due to limitations of healthcare insurance, there seems to be certain treatments that are not fully covered for vitiligo. Currently, vitiligo is considered a cosmetic condition that does not need any extra treatments even though it affects 1-2% of the population (Blundell et al., 2021). Therapies such as TCI therapy are covered by United Healthcare, yet one therapy is not enough for a lifelong condition such as vitiligo (Blundell et al., 2021). Treating disorders early helps with slowing

progression and worsening of symptoms and improves the quality of life, which insurance companies seem to not value and instead they would rather take the chance and not waste money in treatments that can improve the quality of lives of patients in dermatology.

An example of a dermatologic condition which requires expensive treatments is atopic dermatitis (AD), a chronic inflammatory skin disease that relapses and presents a significant detriment to the quality of life (Ariens et al., 2019). According to Ariens et al. (2019), AD can cause sleep loss, concentration problems, and psychological impacts. Patients with AD had to pay $ 371 to $ 489 more out of pocket per year compared to patients without AD based on the article (Ariens et al., 2019). Another problem is financial costs where there are direct costs from all sectors like outpatients and inpatients, the transportation needed to get that dermatological practice, and the medication costs along with the burden of any productivity that is lost when treating this disease.

*Section 2- Solutions to Expensive Dermatological and Healthcare Treatments*

If you can detect diseases like melanoma early and treat them, it can be less costly down the road which helps Hispanic groups that are under financial burden. A solution to this, based on the article by Espinosa & Lio (2019), is increasing diversity in the field of dermatology through Spanish translators, Spanish-speaking physicians, and health professionals of similar background so patients can feel comfortable and can communicate their needs. A seemingly common issue in dermatology are the struggles of making patients feel at ease to describe their issues (Espinosa & Lio, 2019). Another way to prevent high costs is to provide prevention protocols at the state level. Based on the article by Atkins et al, (2021), this has been done in other countries like France, Germany and Australia. In Oregon there is a prevention protocol

where it involves public skin service professionals and primary care providers called the WarOnMelanoma (Atkins et al., 2021). It also involves in-person and online educational resources and their goal is to provide dermatological care in a more modern way like teledermoscopy (Atkins et al., 2021).

Overall, the aim is to reduce cost of the care for melanoma and improve diagnosis that has expanded to states like California, Missouri, Texas, Georgia, Arizona, etc (Atkins et al., 2021). If successful, this should definitely be implemented in more states or nationally. Another method based on the article is other detection programs that need to be funded, in order for primary care doctors to be up to date and to diagnose melanoma sooner rather than later (Atkins et al., 2021). For instance, a program in the University of Pittsburgh Medical Center where they encouraged annual skin cancer screening to patients 35 years and older helped increase the rate of detection (Atkins et al., 2021).

There seems to be a need to promote healthy lifestyles that can improve patients' well-being and lessen risks of diseases like hidradenitis suppurativa. Based on Espinosa & Lio (2019), dermatologists can work with primary physicians to promote lifestyle changes and promote modifications that allow Hispanic patients to easily adapt to their lifestyle that is not costly (2019). Another solution from tandofonline suggests center-based ambulatory care to reduce costs of this disease and others like melanoma (Heise et al., 2023). For example, focus early on educating patients on the progressing symptoms, how to manage pain and therapy, and improve ambulatory care so early stages of this disease can get treated early rather than later (Heise et al., 2023).

With respect to vitiligo and atopic dermatitis, it is a common issue that insurance companies would rather not waste money on treatments for these diseases. Solutions include

promoting more awareness of the diseases and how it affects patients, rejecting the biased notion that cosmetic effects are not an important enough factor to cover costs for patients, and setting up programs to help marginalized groups such as Latino(a) patients are good options. Also, an article by Landow et al. (2014) suggests that teledermatology is also a good cost-reducing alternative which lowers fees and drives time to the practice. This is great for whenever there is a time constraint for the patient who lacks access to public transportation or car.

## Section 3- Lack of Insurance with Latino(a) Patients and the Issues that Arise

Even with people on Medicaid, treatments that are delayed can become unaffordable (Shwe et al., 2019). There are an estimated 31 million adults in the United States uninsured, which in time costs the economy 207 billion dollars per year (Shwe et al., 2019). Based on the article, this is mostly due to coverage gaps in insurance and states that have not expanded their Medicaid while others have (Shwe et al., 2019). Also, an interesting graph this article shows is the percentage of people that are uninsured. For example, the graph shows that around 30% of the people that were uninsured were unauthorized immigrants (Shwe et al., 2019).

When treating skin disorders and diseases, it is important for Latinos to be insured in the first place, so they can get treatment to improve a patient's overall well-being and so they can afford any procedure that they deserve. An article by Zagona-Prizio et al. (2023) states that acne and psoriasis can impact a patient's quality of life. Treating these conditions takes time and constant care yet patients sometimes don’t have time to access dermatology and lack coverage as well. Because of this, sometimes Hispanics rely on primary care doctors rather than a dermatologist or skin specialist. The problem with this is that most will not get the care they need to treat any complex skin conditions or even acne (Zagona-Prizio et al., 2023). You would most

likely get what the article calls “suboptimal” care. In addition, skin color differences among Hispanics can pose even more challenges.

Primary care doctors and sometimes even dermatologists can have difficulty recognizing certain inflammatory skin conditions due to skin color differences. Conditions like atopic dermatitis can worsen if the provider is not equipped to recognize skin conditions in Hispanics with different skin tones. Not only that, but non-White patients including Latinos have more advanced melanomas and lower survival odds than Whites due to not having financial means to be diagnosed earlier (Zagona-Prizio et al., 2023). This is critical information since the Hispanic population is rising, and this problem needs to be faced. Another problem is the fact that Hispanics do not comprise much of a percentage in terms of patients in dermatology. Hispanics comprise 13% while they comprise about a quarter of the U.S. population (Zagona-Prizio et al., 2023). A reason for this is that Hispanics have the highest proportion of uninsured patients at 8.7%. A surprising statistic is that only 5.8% of Hispanics saw dermatologists while 94.1% of Hispanics preferred seeing primary care providers and 0.1% saw an Emergency Room doctor (Zagona-Prizio et al., 2023). This is due to insurance status, as dermatologists may have not had financial systems to support Hispanic patients. There are high numbers of Medicaid-insured patients among Hispanic people and a low number of Medicaid acceptances in dermatology which discourages them from fully utilizing the specialized care they need (Zagona-Prizio et al., 2023).

*Section 3- Solutions to Lack of Insurance with Latino(a) Patients and the Issues that Arise*

All in all, many of these solutions come down to representing racial differences in the workplace, having representative providers that match the patients, and creating easier access to

lifestyle changes in areas like the Gym where people exercise. All of this can help with preventing disorders. Other solutions include easier access to healthy foods that are not costly, health reform at the national and state level so that costs for medicine do not leave you in debt, and not discouraging people to go into the healthcare field in the first place - complicated issues. This is because we have privatized healthcare that prioritizes profit instead of getting patients needed care. As stated earlier, we need better health insurance that includes everyone. This could be complicated and lead to more out of pocket costs if one doesn't understand their insurance. There is a Health Insurance Literacy problem in the U.S. where people from middle age and under don’t know what kind of coverage to choose (Wiltshire et al., 2021). This is a systemic problem, and there should be more emphasis on finding a way to solve these very serious financial issues.

## Section 4- Clear underrepresentation through rising tuition and other barriers

There are few Hispanic dermatologists and practices that account for or represent the Hispanic population. The Hispanic population is increasing, but the number of Hispanics who work in the healthcare field are not rising at the same rate. The same could be said for other minorities in the US except for Asians. An article by Bayne (2022) states that among physicians in the healthcare field, only 5% identify as Black, whereas Black or African Americans number 13% of the overall population, highlighting the low diversity. Similarly, those who identify as Hispanic or Latinos make up 18% of the US population, but they make up only 5.8% of physicians. American Indians or Alaskan natives make up about 0.3% of physicians, and for Hawaiian natives or Pacific Islanders, it is 0.1%. In the overall US population, American Indian or Alaskan natives comprise 0.7% of the population, and Hawaiian native or Pacific Islander

comprise 0.2% of the population (Bayne, 2022). According to a figure from the Association of American Medical Colleges (AAMC) that shows the percentage of all active physicians, 56.2% identified as White while making up 57.8% of the population (Association of American Medical Colleges, 2019). What is left is Asians being 17.1% of active physicians while only making up 7% of the population (Association of American Medical Colleges, 2019).

To further support and show how low racial representation is among Hispanic physicians, an article by Mora et al. (2022), projects that there will be a racial representation deficit of between 37,800 and 124,000 by 2034. The percentages of racial representation are still rising, but at a slower rate than the increase of percentages of minorities in the U.S. population, which results in increased underrepresentation year by year (Mora et al., 2022). This under-representation is worsening and could make racial and ethnic disparities more dire in all areas of healthcare like infant mortality or life expectancy (Mora et al., 2022). Even if you were to address and attempt to solve this issue, it would take decades for it to make an impact in the physician workforce because of the time and commitment it takes to become a physician. Addressing and fixing this issue according to the article allows us to improve and get better healthcare, quality of care for Latinos and other minorities, and possible treatment of the harmful effects that systemic racism has given to minorities.

What the statistics don't show is the full picture of why this is the case. There is clear discrimination and social inequality at work here. College tuition is at an all-time high, and only recently has there been rising support for forgiving student debt and ending predatory student loans. Tuition is a rising issue where students and graduates may also have to deal with costly student loans and debts. Based on the article by Mitchell, Leachman, & Saenz (2019), there are deep state cuts that have been continuing for decades and result in higher costs for students to

complete and attend college. Furthermore, this has made racial inequality worse since rising costs have made it less likely for low-income students of color, such as Hispanic students, to attend college.

Another reason that Mitchell, Leachman, & Saenz (2019) gave for tuition issues was that overall state funding was cut by more than 6.6 billion dollars after what happened in the Great Recession from 2007 to 2009. During this period, colleges started increasing tuition for students and limiting courses in order to keep up with their profits (Mitchell et al., 2019). This does not help students who are pursuing higher education and may prevent people from going into graduate programs - including medical school - especially those of Latino origin. A statistic that is worth mentioning is that every state has had a percentage increase in tuition from 2008 to 2018, with Louisiana's being 106.9% and New Jersey's being 18.3% (Mitchell et al., 2019). Then, there are admissions requirements of medical schools such as application fees, tests for enrollment, and prep courses, which are another time-intensive and costly endeavor for many minorities. Even despite using the financial assistance program that may be available for medical/graduate programs that are meant for low-income students, there are secondary essays that colleges specifically ask for that are not part of the program such as medical programs. Based on Faiz et al. (2023), the enrollment of minorities in medical school has made less than ideal progress. These costs for admissions to public and higher education prevent Hispanics from being providers, which lessens the quality of care for Hispanic patients. Through a cross-sectional study of MCAT examinees and from AAMC's Post-MCAT Questionnaire (PMQ) done by Faize et al. (2023), it can be demonstrated that most minorities (excluding Asians) faced barriers including "lower parental educational levels, greater educational and financial barriers, and greater discouragement from pre-health advisers than White students".

Again, this is a worrying problem since diversity in the field of medicine improves communication and the type of care the patient can receive, and continuing these inequities will only make this problem worsen over time. Currently, in 2021, only 1% of medical school matriculates identified as American Indian or Alaska Native, 11% as Black, 13% as Hispanic, and 0.4% as Native Hawaiian or Pacific Islander" (Faize et al., 2023). A myriad of factors contribute to the reasons that this is happening to these particular minorities. These reasons range from mass incarceration that targets low-income minorities disproportionately to "interpersonal discrimination" which refers to one race being viewed less favorably in the admission process than another (Faize et al., 2023).

For all the reasons stated above which create barriers to Hispanics as patients and healthcare providers, dermatology is the second least diverse medical specialty among physicians right after orthopedic surgery (Akhiyat et al., 2020). Dermatology is a field that works with many people of various races and ethnic groups, and yet such a low representation could be disheartening to the patient-provider experience. In the acceptance statistics of medical schools, only 34% of African-American applicants were accepted and the acceptance rates for Whites, Asians, and Hispanics were similar at around 40% (Akhiyat et al., 2020). The same year, only 5.7% and 4.6% of African-American and Hispanic doctors who started medical school graduated, and only 3% and 4.2% of all dermatologists were African-American and Hispanic, respectively (Akhiyat et al., 2020). These statistics point to very low retention rates for these minority groups. If minorities would be able to get better support, there should be an increase in minority physicians. In turn, these physicians would be expected to be more willing to serve lower-income patients with Medicaid or without insurance.

*Section 4- Solutions to Clear underrepresentation through rising tuition and other barriers*

An article by Mitchell et al. (2019) states solutions to this problem, and many can help Hispanics and low-income Latino students pursue college and medical school. The ideas suggested involve funding public higher education to make it more affordable, invest more on need-based programs rather than merit-based programs (because students that use merit-based programs are less likely to need financial aid), and provision of more state funds to build more capacity of rooms for students and well-paid professors for colleges (Mitchell et al., 2019). Implementation of these steps can help people of any race and color, and would lower educational barriers faced by low socioeconomic Latino(a)s. Even though these funding steps are recommended, states as of 2019 have made funding cuts for public colleges. There needs to be more state funding for public education, not less; pursuing this funding can help develop the economy by creating a stronger middle class thanks to making higher education more affordable (Mitchell et al., 2019). Without these funding's, minorities could continue to be disproportionately affected and unable to become providers to the minority patients in dermatology.

## Section 5- Cultural and Systemic Barriers to Hispanics that Prevent Proper Dermatologic Care

Based on a survey from 2001, the reasons that high numbers of Hispanics deal with improper care includes Spanish-only speakers having a hard time communicating with their physicians, immigration status where non-citizens do not have an opportunity to qualify for insurance, and low income households in which - individuals qualified for Medicaid - do not visit often to their respective doctor (Doty, 2003). Also, based on the article by Bosworth et al.,

(2021), Hispanics account for 19% of population but account for 29% of the uninsured population and other minorities like black individuals account for 13 percent of population but 16 percent of uninsured.

While dermatological treatments are extremely expensive, other barriers prevent Hispanic and minority patients from accessing the field from a patient perspective. According to Toy et al. (2021), three categories cause barriers to access to healthcare and pediatric healthcare: there are systemic, sociocultural, and individual barriers specific to each patient. Subcategories for systemic barriers include financial issues, long wait times, and the geography or location of the dermatology treatment center relative to the patient (Toy et al., 2021). Sociocultural barriers pertain to differences in cultural beliefs between the patient and the provider, which also includes Latino language barriers. Patient health knowledge and race are classified as individual barriers. However, healthcare access barriers are sometimes too complicated to fit into three major categories because they are often multifactorial and existing for many different reasons. Barriers to healthcare access require more data analysis, but with what we know so far, it is hard to argue against the assertion that the healthcare system is unjust to not just Latinos but to many people who need care.

Among medical specialties, dermatology is especially subject to problems like health inequities and barriers. Based on Toy et al. (2021), these problems include underrepresentation in healthcare providers of ethnic minorities with limited training in the color of skin. This can result in increased worry by the patient, confusion for the provider which could make mistreatment more likely, and dissatisfied visits between providers and patients. Pediatric dermatology is less known but has just about the same problems and barriers as adult dermatology. For example, with respect to systemic barriers, the study released by Toy et al. (2021) showed that many

dermatologists did not accept Medicaid coverage. Even if dermatologists accept Medicaid, patients have less access to other healthcare providers, fewer outpatient visits, and more visits to the ER because of a lack of options (Toy et al., 2021). With respect to geography, increased distance from the patient to the dermatologist who even accepts Medicaid meant that the patients were less likely to stick with the treatment regimen and be less likely to follow up (Toy et al., 2021). Dermatologists are more likely to be located in large cities. In pediatric dermatology, the average wait time was 6 weeks with 25% of patients waiting for even more than 10 weeks (Toy et al., 2021).

With respect to sociocultural barriers, dermatologists' transition to teledermatology was a problem for Spanish speaking patients as there was a decrease in them making use of general dermatologic care after that transition. The reason for this is because of the possibility of some lower income Hispanics having difficulty using emails or digital systems and having difficulty with language barriers over telecommunication (Toy et al., 2021). These language barriers, whether for pediatric, adult dermatology, or regular healthcare, lead to possible misunderstandings that could affect the quality of treatment or even misuse of medications (Toy et al., 2021). Another barrier to healthcare that may dissuade people from using it is the language barrier. English is the primary language in the United States, and so navigating through the system itself could be a task if there is no designated bilingual system in their area. Hispanic families who only speak Spanish could rely on any other bilingual family members, but there are again challenges with medications that could be prescribed to them as most prescriptions are written in English, big pharmaceutical companies are in English, and health care plans are in English (Amador, 2022). This can cause higher rates of health issues if medical instructions are misinterpreted, and make some individuals less likely to rely on healthcare.

Hispanics are the largest minority group in the U.S., and yet face many health disparities. Diabetes type 2 and obesity are higher for Hispanics (Amador, 2022). For a bit of history, prior to the ACA, the Latino population was the minority with the most uninsured members, and after ACA passed, they were still the population leading with the most uninsured (Amador, 2022). With regard to individual barriers, some people were too embarrassed to seek care or be judged by their provider, whether from personal experience or from the embarrassment of not having the financial means to pay for certain medications which was found out through the searching of 600 total articles that discussed individual barriers (Toy et al., 2021).

Besides the issue of language, there are other cultural differences between Hispanics and the majority population. For example, Hispanics are less likely to go to physicians in the first place and they often use home remedies (Amador, 2022). Also, if the physician is not ethnically or culturally informed, he/she may misinterpret what the patient is saying to them through phrases or words, and vice versa. Hispanic cultural foods may not be taken into account when taking care of the patient. For Hispanics, high-cholesterol foods are a common part of the diet - such as birria, pozole, and meat like churrascos that can have an underlying role in worsening skin conditions (2022). Latino immigrants also experience the same problems and comprise a quarter of the Hispanic population and face the disparity in the healthcare system as much as native Hispanics (Greenman III, 2023). It should be remembered that healthcare is a private system that creates disparities for low-income whites and minorities.

### *Section 5- Solutions to Cultural and Systemic Barriers to Hispanics that Prevent Proper Dermatologic Care*

Solutions to cultural and systemic barriers to these issues in dermatologic care can include free clinics and a set of $4 prescription lists that limits high cost medicine that would otherwise prevent Latino(a)s from accessing medicine that could treat their ailment (Shwe et al., 2018). Furthermore, free clinics can provide for the uninsured while acting like a safety net in case any other options are not available to help them (Shwe et al., 2019). However, there needs to be more actions taken and laws passed to improve access to healthcare in general, and to dermatology especially, so that Hispanics can get the proper care they need from basic primary care to dermatology. Actions that help lessen Hispanic cultural and individual barriers could be in the form of increased understanding of these barriers, further research to reduce the impacts of these barriers that lead to health disparities among racial and ethnic groups, and possible patient handouts in languages other than English (Toy et al., 2021). Based on an article by Doty (2003), there are suggested policies or laws that could be passed to increase trained medical interpreters and health care services that reach Hispanic groups who carry the burden of having both a lack of English proficiency and health insurance

**Section 6- Survey Results and Discussion**

The results of the survey are categorized into a percentage column chart, where the majority of the Hispanic participants complained about high cost treatments and have experienced some sort of cultural or language barrier. This is shown in **Figure 1** of the Table and graphs section. Ninety percent of the participants responded that they experienced high cost treatments, while 50% experienced cultural/language barriers in healthcare. With respect to the other categories, 30% experienced some sort of discrimination in the medical or dermatology field, 80% were insured while 20% were not, 10% had a positive outlook to

dermatologic/medical care, 30% were not able to see a dermatologist, while 40% had a racially or ethnically concordant provider. **Figure 2** shows results for participants that said they were low income. It shows different percentages in the categories compared to the overall Hispanic participant pool that included low, high, and middle income. What was notable were the increases of discrimination from 30% to 50% and of same racial/ethnic providers from 50% to 75% for general Hispanic to low income Hispanic, respectively. **Figure 3** shows the breakdown for Middle income participants, and there was a large difference or drop-off of percentage of experience, cultural language barriers, and positive outlook in dermatologic care with both being 0% compared to the Low income group from **Figure 1**.

In terms of interpreting results, 20% of the overall Hispanic participants in this survey were uninsured (**Figure 1)** which matches closely to our findings from academic sources. For example, 25.1% of Hispanic adults between 19 to 64 were uninsured during 2021 (Keisler-Starkey & Bunch, 2020). Even though this survey has a small sample size of 10 participants, it is important to take into account that there were Hispanic American citizens without insurance. Also, the match between statistics in my questionnaire and academic sources adds more validity to both. The statistics concerning insurance coverage is consistent with **Figures 1-3**, which shows that income influenced whether participants had high costs and insurance. For instance, Low income had 100% of the participants having an issue with high cost treatments despite having Medicaid coverage and 80% of Middle income had issues with high cost treatments.

Another thing to be looked at is discrimination, which was similar overall between income classes. Overall it was 30% from **Figure 1**, for Low income it was 50% from **Figure 2**, and for Middle income it was 40% from **Figure 3**. This seems to speak more on simple racial discrimination rather than for the participants' income, as the statistics for each Figures from 1 to

3 are similar percentage wise for it to be discrimination based on their income. This was also noted in my analysis before in section 4, where minorities are targeted by systemic inequalities and even in the admissions process (Faize et al., 2023). Differences that should be surprising include both the cultural/language barriers and positive outlook in medical care percentages in **Figure 3**. Middle income seemed to not face the same barriers as Low income. This may be related to the generalization that Middle income people are more likely than Low income to be bilingual. The difference may also be linked to where people live, such as in a purely Hispanic or English-speaking community. It was mentioned by participant 8 in **Table 8** and participant 2 in **Table 4** that it was hard to communicate without their daughters present to assist in interpreting what their providers were telling them.

As for positive outlook, a common complaint that led to more of a negative outlook in healthcare was that the participants were insured, but still did not have enough to pay for medications they may need. There is one outlier in terms of participants' response for positive outlook, where participant 4 had a positive experience in healthcare. This may have been due to the low income participant being on Medicaid, where they are more likely to get the medications covered and accessible to that participant. Lastly, for the same racial/ethnic provider, the statistics were surprisingly higher for low income than for middle income. This may be due to low income participants likely going to their own Hispanic communities that they can relate to. For example, based on **Figure 1** and **Figure 2,** which represents overall Hispanics and low income Hispanics respectively, the same racial/ethnic provider was low with 50% and then jumped to 75% for low income Hispanics. For Middle income, based on **Figure 3,** was 40% for the same racial/ethnic provider which may be due to the ability to move to other communities. Lastly, not seeing a dermatologist inequality was similar in Figures 1, 2, and 3 with 30%, 25%,

and 40% respectively. These statistics from **Figures 1-3** are actually higher than the statistic that only 5.8% of Hispanics saw dermatologists (Zagona-Prizio et al., 2023). This may be because of the small sample size, but there is still a substantial number of Hispanics that do not see a dermatologist. With all of these inequalities by the participants made present and connected with the literature analysis, it is safe to assume that the hypothesis is supported. To restate, the hypothesis is that there are clear inequalities and complaints made by the participants that are going to support the inequalities mentioned in the literature analysis of the thesis.

### *Limitations of Survey*

There was a limited sample size used for this study. A total of ten participants were questioned, which may have produced results that could have been skewed. Also, participants were close family members, co-workers, and friends. This may have produced biased results or more personal answers that we may have not gotten with random, anonymous participants. A control group was not made with participants of another ethnicity or racial background to compare with our Hispanic/Latino(a) background group of participants. Having this extra set of data could have either strengthened or weakened the evidence in favor of our hypothesis.

## Conclusion

Investigation of dermatological care using a dual approach of literature review research and questionnaires has revealed that there are many inequalities that prevent access to minorities like Hispanics. Hispanics are a growing demographic comprising 19% of the US population, yet they face systemic issues and challenges that can cause many problems going forward unless solutions are presented (Zagona-Prizio et al., 2023). I hope the research and the solutions I

mention can be a step forward to convincing others that these issues cannot be solved unless they are tackled on a societal, local, and national level. First, overall healthcare in the United States needs to be changed or adapted to develop a system where everyone has an equal chance and can afford any medicine. Dermatology procedures and treatments would then need to be covered or at least made more affordable with improving technology. Also, insurance companies need to change their policies to accept certain diseases not as cosmetic, but as quality of life determinants that need to be covered. Most importantly, underrepresentation in dermatology has to be tackled from providers to patients. Lastly, cultural barriers that affect the care of Hispanics need to be tackled such as providing more Spanish translators and free clinics to provide for the uninsured (Shwe et al., 2019). Dermatology and healthcare are important for the future generation, so it should not be the next generation's problem to continue to face these inequalities.

**Bibliography**

Akhiyat, S., Cardwell, L., & Sokumbi, O. (2020). Why dermatology is the second least diverse specialty in medicine: how did we get here? *Clinics in dermatology, 38*(3), 310-315. https://doi.org/10.1016/j.clindermatol.2020.02.005

Amador, M. (2022). Health Disparities Among Hispanic Low Socioeconomic Communities. Retrieved from https://scholarworks.calstate.edu/downloads/9306t575k

Ariëns, L. F., Van Nimwegen, K. J., Shams, M., de Bruin, D. T., Van der Schaft, J., van Os-Medendorp, H., & De Bruin-Weller, M. (2019). Economic burden of adult patients with moderate to severe atopic dermatitis indicated for systemic treatment. *Acta dermato-venereologica, 99*(9), 762-768. doi:10.2340/00015555-3212

Association of American Medical Colleges. (2019). *Figure 18. Percentage of all active physicians by race/ethnicity, 2018*. AAMC. https://www.aamc.org/data-reports/workforce/data/figure-18-percentage-all-active-physicians-race/ethnicity-2018

Atkins, M. B., Curiel-Lewandrowski, C., Fisher, D. E., Swetter, S. M., Tsao, H., Aguirre-Ghiso, J. A., Soengas, M. S., Weeraratna, A. T., Flaherty, K. T., Herlyn, M., Sosman, J. A., Tawbi, H. A., Pavlick, A. C., Cassidy, P. B., Chandra, S., Chapman, P. B., Daud, A., Eroglu, Z., Ferris, L. K., & Fox, B. A. (2021). The State of Melanoma: Emergent Challenges and Opportunities. *Clinical Cancer Research, 27*(10), 2678–2697. https://doi.org/10.1158/1078-0432.CCR-20-4092

Bayne, C. O. (2023). The value of diversity, equity, and inclusion: race and ethnicity affecting patients. *Hand Clinics, 39*(1), 9-15. https://doi.org/10.1016/j.hcl.2022.08.001

Blundell, A., Sachar, M., Gabel, C. K., & Bercovitch, L. G. (2021). The scope of health insurance coverage of vitiligo treatments in the United States: Implications for health care

outcomes and disparities in children of color. *Pediatric Dermatology, 38*, 79-85. https://doi.org/10.1111/pde.14714

Bosworth, A., Finegold, K., & Ruhter, J. (2021). The remaining uninsured: Geographic and demographic variation. Retrieved from https://aspe.hhs.gov/sites/default/files/private/pdf/265286/Uninsured-Population-Issue-Brief.pdf

Donohue, J. M., Cole, E. S., James, C. V., Jarlenski, M., Michener, J. D., & Roberts, E. T. (2022). The US Medicaid program: coverage, financing, reforms, and implications for health equity. *JAMA, 328*(11), 1085-1099. doi:10.1001/jama.2022.14791

Doty, M. M. (2003). HISPANIC PATIENTS' DOUBLE BURDEN: LACK OF HEALTH INSURANCE AND LIMITED ENGLISH. New York: Commonwealth Fund. Retrieved from https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_fund_report_2003_feb_hispanic_patients_double_burden__lack_of_health_insurance_and_limited_english_doty_hispanicdoubleburden_592_pdf.pdf

Dwan, R. (2020) Health Insurance: The Problem, Not the Solution. *Journal of International Business and Law, 19*(2). Retrieved from https://scholarlycommons.law.hofstra.edu/jibl/vol19/iss2/8

Espinosa, M. L., & Lio, P. (2019). Skin issues that affect patients with skin of color. *Dermatology Times, 40*(2). Retrieved from https://www.dermatologytimes.com/view/skin-and-disparity-issues-affect-patients-color

Faiz, J., Essien, U. R., Washington, D. L., & Ly, D. P. (2023, April). Racial and ethnic differences in barriers faced by medical college admission test examinees and their

association with medical school application and matriculation. *In JAMA health forum* (Vol. 4, No. 4, pp. e230498-e230498). American Medical Association. doi:10.1001/jamahealthforum.2023.0498

Gaffney, A., & McCormick, D. (2017). The Affordable Care Act: implications for health-care equity. *The Lancet, 389*(10077), 1442-1452. https://doi.org/10.1016/S0140-6736(17)30786-9

Gogebakan, K. C., Mukherjee, K., Berry, E. G., Sonmez, K., Leachman, S. A., & Etzioni, R. (2021). Impact of novel systemic therapies on the first-year costs of care for melanoma among Medicare beneficiaries. *Cancer, 127*(16), 2926-2933. https://doi.org/10.1002/cncr.33515

Greenman III, W. C. (2023). Healthcare Disparities and Hispanic Immigrants: A Systematic Review of the Literature. Retrieved from https://trace.tennessee.edu/cgi/viewcontent.cgi?article=3567&context=utk_chanhonoproj

Heise, M., Staubach, P., Nikolakis, G., Schollenberger, L., Mauch, M., Burckhardt, M., Zamsheva, M., Strobel, A., Langer, G., Bechara, F., Kirschner, U., Hennig, K., Kunte, C., Goebeler, M., Podda, M., Grabbe, S., & Schultheis, M. (2023) A center-based, ambulatory care concept for hidradenitis suppurativa improves patient outcomes and is also cost-effective. *Journal of Dermatological Treatment, 34*(1). https://doi.org/10.1080/09546634.2023.2284105

Landow, S. M., Mateus, A., Korgavkar, K., Nightingale, D., & Weinstock, M. A. (2014). Teledermatology: Key factors associated with reducing face-to-face dermatology visits. *Journal of the American Academy of Dermatology, 71*(3), 570-576. https://doi.org/10.1016/j.jaad.2014.02.021

Keisler-Starkey, K., & Bunch, L. N. (2020). Health insurance coverage in the United States: 2019. *Washington, DC: US Census Bureau*. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2022/demo/p60-278.pdf

Mitchell, M., Leachman, M., & Saenz, M. (2019). State higher education funding cuts have pushed costs to students, worsened inequality. *Center on Budget and Policy Priorities, 24,* 9-15. Retrieved from https://tacc.org/sites/default/files/documents/2019-11/state_he_funding_cuts.pdf

Mora, H., Obayemi, A., Holcomb, K., & Hinson, M. (2022). The national deficit of Black and Hispanic physicians in the US and projected estimates of time to correction. *JAMA Network Open, 5*(6), e2215485-e2215485. doi:10.1001/jamanetworkopen.2022.15485

Shwe, S., Kassira, S., Kim, D. J., Elsensohn, A., & Lee, P. (2019). How to navigate dermatology care for the uninsured. *Journal of the American Academy of Dermatology, 80*(6), 1809-1813. https://doi.org/10.1016/j.jaad.2018.06.072

Toy, J., Gregory, A., & Rehmus, W. (2021). Barriers to healthcare access in pediatric dermatology: a systematic review. *Pediatric Dermatology, 38,* 13-19. https://doi.org/10.1111/pde.14748

Tsentemeidou, A., Sotiriou, E., Ioannides, D., & Vakirlis, E. (2022). Hidradenitis suppurativa-related expenditure, a call for awareness: Systematic review of literature. *JDDG: Journal der Deutschen Dermatologischen Gesellschaft*, *20*(8), 1061-1072. https://doi.org/10.1111/ddg.14796

Types of Health Insurance. (n.d.). MetLife. Retrieved from https://www.metlife.com/stories/benefits/types-of-health-insurance/

Wiltshire, J., Liu, E., Dean, C. A., Colato, E. G., & Elder, K. (2021). Health insurance literacy and medical debt in middle-age Americans. HLRP: *Health Literacy Research and Practice, 5*(4), e319-e332. https://doi.org/10.3928/24748307-20211102-01

Zagona-Prizio, C., Khan, S., Yee, D. K., Khan, S., Maynard, N., Reddy, R., ... & Armstrong, A. W. (2023). Differences in accessing dermatology offices, primary care offices, and emergency departments between Hispanics and Non-Hispanic White Patients. *Dermatology Online Journal, 29*(1). https://doi.org/10.5070/D329160207

Zieff, G., Kerr, Z. Y., Moore, J. B., & Stoner, L. (2020). Universal Healthcare in the United States of America: A Healthy Debate. *Medicina, 56*(11). https://doi.org/10.3390/medicina56110580

**Tables and Figures**

| Table 1 (Participant 1 - Hispanic w/ Ecuadorian Honduranean Descent - Middle Income) | |
|---|---|
| **Interview Questions** | **Answers** |
| **1. Are you currently insured?** | Yes I am insured, but it is difficult to stay insured because work doesn't offer insurance and state insurance requires to show proof of income every year and to pay copayments. |
| **2. Have you ever felt discriminated against in the medical setting/dermatology setting?** | No. but there has been long wait times. |
| **3. Have you ever had to forgo treatment due to high costs** | For certain creams yeah. I also had to skip seeing my dermatologist for months because I did not have the money and time to see her. And in general, I had to stop taking birth control because insurance did not want to pay. |
| **4. Do you currently see a dermatologist, if yes, how has your experience been?** | Yes. My dermatologist has been professional. |
| **5. Were there any cultural or language barriers to your care?** | No language or culturals. |
| **6. What is your opinion on the state of not just dermatological care, but overall health care?** | Like I said before, I was not able to see a dermatologist for some time. Also, I have not been able to see an in-network gastroenterologist. So it is not good. |
| **7. Is your provider of the same ethnic/racial background?** | My medical doctor is Hispanic |

| Table 2 (Participant 2 - Hispanic w/ Ecuadorian Honduranean decent - Middle Income) | |
|---|---|
| **Interview Questions** | **Answers** |

| 1. Are you currently insured? | Yes, I am currently insured<br>I'm insured by my job<br>It's difficult financially because I have to pay monthly premiums plus I have to pay any out of pockets like deductible and coinsurance |
|---|---|
| **2. Have you ever felt discriminated against in the medical setting/dermatology setting?** | No. |
| **3. Have you ever had to forgo treatment due to high costs** | Most medical procedures, even if it preventative/screening, there's always a fee I have to pay because insurance hardly pays 100% for services<br>I'm always hesitant to go to the doctor because of that but I have to go to maintain my health or make myself feel better if I'm sick |
| **4. Do you currently see a dermatologist, if yes, how has your experience been?** | Yes I have a dermatologist.<br>I first saw him last year and I will be seeing him yearly for a skin screening. My experience was good. |
| **5. Were there any cultural or language barriers to your care?** | No barriers in my case. |
| **6. What is your opinion on the state of not just dermatological care, but overall health care?** | Healthcare is all business. It is hard to trust the healthcare system when hospitals/clinics see money and not people. I have seen a lack of empathy amongst healthcare workers. Also, both my parents do not speak English and it is hard to find professionals who speak their language and it worries me about the care they receive due to the language barrier. People may get irritated with the barrier instead of helping my parents feel better. |
| **7. Is your provider of the same ethnic/racial background?** | My obgyn is Hispanic and male. My primary physician is white and male. My dermatologist is Indian and male. It is low numbers to have a Hispanic doctor especially where I live. The demographics where I live is more white population. |

| **Table 3 (Participant 3 - Honduranean born immigrant - Low income - Age: 64)** | |
|---|---|
| **Interview Questions** | **Answers** |
| **1. Are you currently insured?** | Insured if I lose my job I can apply for Medicare |
| **2. Have you ever felt discriminated against in the medical setting/dermatology setting?** | In medical setting, provider complained why I didn't speak or understand english. |
| **3. Have you ever had to forgo treatment due to high costs** | Sometimes I can't pay for my medication because insurance won't pay |
| **4. Do you currently see a dermatologist, if yes, how has your experience been?** | Yes I've been to a dermatologist my daughter goes in with me to translate to make things smoother. Without her to translate it would be difficult. |
| **5. Were there any cultural or language barriers to your care?** | I feel more comfortable when my daughter comes in with me, but it is difficult for me to go to providers and the dermatology. |
| **6. What is your opinion on the state of not just dermatological care, but overall health care?** | I wish that I could qualify for the state insurance so I wouldn't have to worry about my medication costs |
| **7. Is your provider(s) of the same ethnic/racial background?** | No. |

| **Table 4 (Participant 4 - Ecuadorian born immigrant- Disability and Low Income)** | |
|---|---|
| **Interview Questions** | **Answers** |
| **1. Are you currently insured?** | Has Medicaid<br>Not difficult because I have disability |

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|---|---|
| | |
| **2. Have you ever felt discriminated against in the medical setting/dermatology setting?** | No discrimination because I go with my daughters, but I feel like if I went by myself there would be lots of difficulty. |
| **3. Have you ever had to forgo treatment due to high costs** | I needed spine surgery.<br>The insurance was taking too long to cover the procedure so I had to go to the emergency from the pain and they performed an emergency surgery.<br>For dermatology, they covered most nut was still high at times with Medicaid, but the times where I had to wait just to see my dermatologist was too much. |
| **4. Do you currently see a dermatologist, if yes, how has your experience been?** | Yes.<br>I see a dermatologist.<br>Not happy with the practice.<br>Only prescribe creams. |
| **5. Were there any cultural or language barriers to your care?** | Yes, if my daughters can't come they have a translator. |
| **6. What is your opinion on the state of not just dermatological care, but overall health care?** | I don't have to worry about medication costs because Medicaid covers them |
| **7. Is your provider of the same ethnic/racial background?** | My general doctor is Latin too. |

| **Table 5 (Participant 5 - Cuban born - Upper High Income)** | |
|---|---|
| **Interview Questions** | **Answers** |
| **1. Are you currently insured?** | Yes, my work provided me insurance in the dental office. |
| **2. Have you ever felt discriminated against in the medical** | No, I felt welcomed in any setting. Even though my provider is not Hispanic, there |

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| **setting/dermatology setting?** | were no issues or disconnect between us. |
| **3. Have you ever had to forgo treatment due to high costs** | Some medications costed a lot. It is a very big issue problem in this system. |
| **4. Do you currently see a dermatologist, if yes, how has your experience been?** | Yes, It has been a fine experience with no issues. |
| **5. Were there any cultural or language barriers to your care?** | No. |
| **6. What is your opinion on the state of not just dermatological care, but overall health care?** | I think healthcare has to change for the better. Some medications are surprisingly too high, and I am not sure how they expect people to pay so much. |
| **7. Is your provider of the same ethnic/racial background?** | No, he is White. |

**Table 6 (Participant 6 - Dominican Decent - Lower Middle Income)**

| **Interview Questions** | **Answers** |
|---|---|
| **1. Are you currently insured?** | No, I am not currently insured. My workplace does not provide any insurance for me, and it's difficult for me to treat myself with medications. This includes dermatology. |
| **2. Have you ever felt discriminated against in the medical setting/dermatology setting?** | No I have not. |
| **3. Have you ever had to forgo treatment due to high costs** | I have not had treatment for dermatology to begin with. |
| **4. Do you currently see a dermatologist, if yes, how has your experience been?** | I do not have insurance so I have not gone whatsoever. |
| **5. Were there any cultural or language barriers to your care?** | No, I was born here and speak both languages. |
| **6. What is your opinion on the state of not just dermatological care, but overall** | It is pretty terrible. Healthcare is more about profit than anything else. It seems |

| **health care?** | like they do not care about anybody. |
|---|---|
| **7. Is your provider of the same ethnic/racial background?** | In the past, my medical provider was Hispanic. I cannot say much about dermatologists since I have not gotten insurance for that or any other provider since turning 21. |

| **Table 7 (Participant 7 - Dominican born immigrant - Middle Income)** | |
|---|---|
| **Interview Questions** | **Answers** |
| **1. Are you currently insured?** | Yeah, my job provided me insurance through a promotion just 1 year ago. |
| **2. Have you ever felt discriminated against in the medical setting/dermatology setting?** | In my younger years I felt like there were times where they didn't treat me the same as any other of their patients. |
| **3. Have you ever had to forgo treatment due to high costs** | Yes, even though my insurance covers my dermatologist, it has high co-payment and some medications that I wanted for my hair were too expensive. |
| **4. Do you currently see a dermatologist, if yes, how has your experience been?** | Currently I do not. The experience beside the high cost medication has been good. |
| **5. Were there any cultural or language barriers to your care?** | When I came to America, there was a disconnect as I had to improve my English and needed a translator from my old doctor. Now not so much. |
| **6. What is your opinion on the state of not just dermatological care, but overall health care?** | There needs to be some sort of change. We spend too much on other resources instead of on healthcare. The idea of universal healthcare sounds good to me. |
| **7. Is your provider of the same ethnic/racial background?** | No, but I do not currently see one. |

| Table 8 (Participant 8 - Puerto Rican Descent - Low Income) | |
|---|---|
| **Interview Questions** | **Answers** |
| **1. Are you currently insured?** | No I am not insured, that I know of. |
| **2. Have you ever felt discriminated against in the medical setting/dermatology setting?** | No I do not think so. |
| **3. Have you ever had to forgo treatment due to high costs** | I have avoided treatment because of not having insurance to cover medications. I know that this is kind of bad but there is not much else I can do unless I have a stable job that gives insurance. |
| **4. Do you currently see a dermatologist, if yes, how has your experience been?** | I have never been to one ever since I was a kid so I can't answer that. |
| **5. Were there any cultural or language barriers to your care?** | I am bilingual so there is not much language barrier but my Spanish needs some improvement. I live in a mainly Hispanic neighborhood and some of the providers actually don't speak much English or have a thick accent that makes it hard to communicate sometimes. |
| **6. What is your opinion on the state of not just dermatological care, but overall health care?** | Pretty bad to be honest. Really expensive and for people who cannot afford it, they can be in debt. There is also high hospital costs when I went there for a couple of emergencies. |
| **7. Is your provider of the same ethnic/racial background?** | Yes. |

| Table 9 (Participant 9 - Mexican Descent - Middle Income) | |
|---|---|
| **Interview Questions** | **Answers** |
| **1. Are you currently insured?** | Yes. |
| **2. Have you ever felt discriminated** | Luckily I have not. |

| | |
|---|---|
| **against in the medical setting/dermatology setting?** | |
| **3. Have you ever had to forgo treatment due to high costs.** | Yes, when I went to the dermatologist for acne, there was this hydro boost cream that was out of pocket that I could not pay for. |
| **4. Do you currently see a dermatologist, if yes, how has your experience been?** | Yes, it has been fine but wait times are long |
| **5. Were there any cultural or language barriers to your care?** | No, I am bilingual so the experience has been fine. |
| **6. What is your opinion on the state of not just dermatological care, but overall healthcare?** | Healthcare is very complicated. I do not know much of it but I can tell that it is difficult for everybody. |
| **7. Is your provider of the same ethnic/racial background?** | No, he is white. |

**Table 10 (Participant 10 - Mexican Born - Low Income)**

| **Interview Questions** | **Answers** |
|---|---|
| **1. Are you currently insured?** | Yes I have insurance through my job. However, I am not sure if I am at risk if I ever lose it. |
| **2. Have you ever felt discriminated against in the medical setting/dermatology setting?** | I have, but it was more of the environment of the places I visited. I lived in a place where there were less Hispanics, so the dermatologist I went to did not have a translator. I later moved with my family to a Hispanic environment. |
| **3. Have you ever had to forgo treatment due to high costs** | Most of the time. |
| **4. Do you currently see a dermatologist, if yes, how has your experience been?** | I have a couple times but again they did not have a translator where I used to live. It was very awkward and I had to communicate through google translate. |

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| | I don't blame him though. Right now the dermatologist I see is Hispanic and it's fine. |
| **5. Were there any cultural or language barriers to your care?** | Yes, there was a language barrier and they could have given me something that could have been avoided if we were both speaking the same language. |
| **6. What is your opinion on the state of not just dermatological care, but overall health care?** | I think almost everyone can agree that the healthcare in this country is bad. |
| **7. Is your provider of the same ethnic/racial background?** | The provider I see now is Hispanic. Before, no. |

**Figure 1**

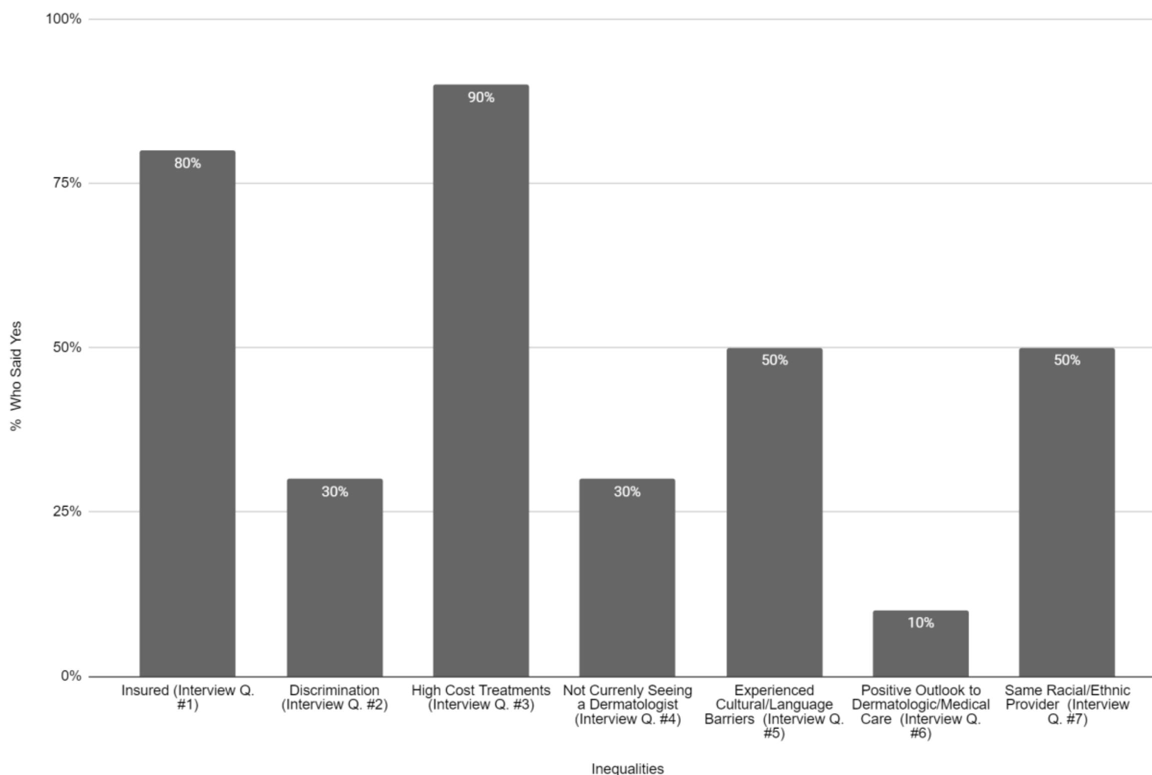

**Figure 2**

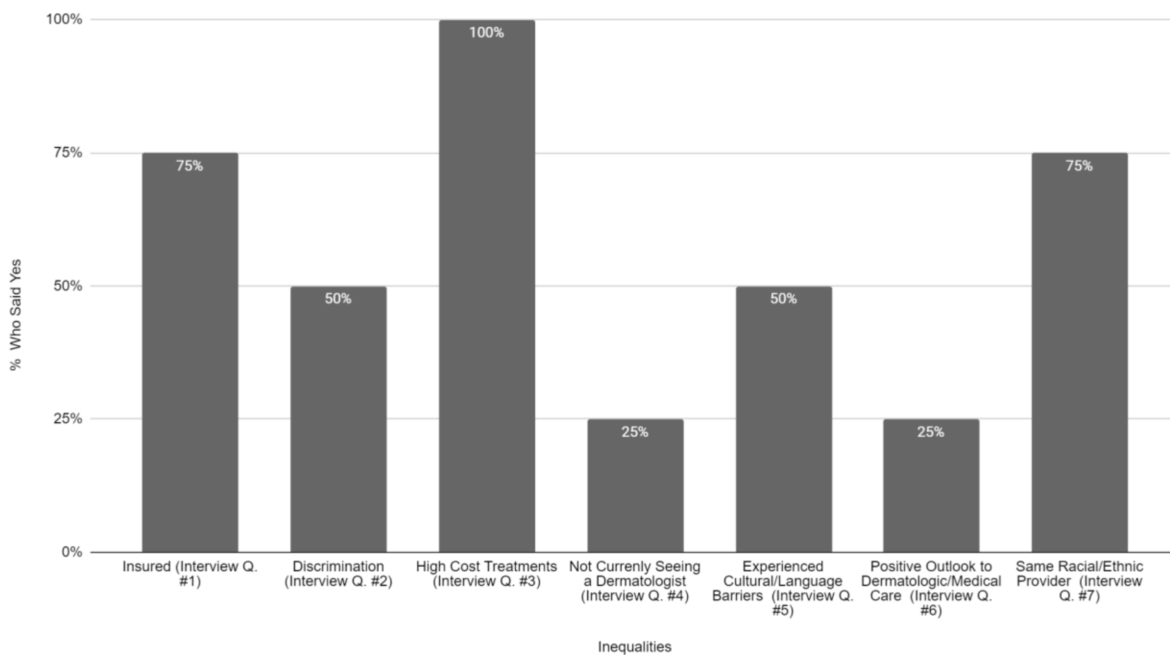


**Figure 3**