DOI: 10.1111/1475-6773.14020

RESEARCH ARTICLE

HSR Health Services Research

Avoiding Medicaid enrollment after the reversal of the changes in the public charge rule among Latino and Asian immigrants

Arturo Vargas Bustamante MPP, PhD[1] | Lucía Félix-Beltrán MPP[2] | Joseph Nwadiuko MPH, MD[2] | Alexander N. Ortega MPH, PhD[3]

[1]Department of Health Policy and Management, UCLA Fielding School of Public Health, Los Angeles, California, USA

[2]UCLA Fielding School of Public Health, Los Angeles, California, USA

[3]Department of Health Management and Policy, Dornsife School of Public Health, Drexel University, Philadelphia, Pennsylvania, USA

Correspondence
Arturo Vargas Bustamante, Department of Health Policy & Management, UCLA Fielding School of Public Health, 650 Charles E. Young Drive South Room 31-245, Los Angeles, CA 90095, USA.
Email: avb@ucla.edu

Funding information
Commonwealth Fund (Bustamante), Grant/Award Number: 20202800; National Institute on Minority Health and Health Disparities (Ortega), Grant/Award Number: R01 MD014146

Abstract

Objective: To estimate the avoidance of Medicaid enrollment among Latino and Asian immigrants due to fears about immigration status. In 2019, changes to the "public charge" rule made it difficult for immigrants to receive a green card or permanent residence visa, particularly for those who used health and nutrition benefits. Despite the Biden administration's reversal of these changes, fear and misinformation persist among immigrants.

Data Sources: Pooled data from the 2017 to 2020 California Health Interview Survey.

Study Design: We used adjusted predicted probability models to estimate differences in access to and use of health care and health insurance coverage among Latino and Asian immigrant adults with and without green cards, using US citizens as the reference. We estimated the avoidance of Medicaid enrollment among immigrants without a green card, the immigrant population subject to the public charge rule.

Data Collection/Extraction Methods: Population stratified by race/ethnicity and green card status.

Principal Findings: Latino immigrants without a green card were −23.1% (CI: −27.8, −18.4) less likely to be insured, −9.2% (CI: −12.8, −5.5) less likely to have Medicaid coverage, −9.3% (CI: −14.5, −4.1) less likely to have a usual source of care, and −8.4% (CI: −13.2, −0.3) less likely to have a physician visit relative to citizens. Asian immigrants without a green card were −11.7% (CI: −19.7, −3.72) less likely to be insured, −8.8% (CI: −11.6, −6.1) less likely to have Medicaid coverage, −11.6% (CI: −19.3, −3.9) less likely to have a usual source of care, and −11.0% (CI: −19.2, −2.3) less likely to have a physician visit. Between 107,956 and 192,905 Latino immigrants and 1294 and 4702 Asian immigrants in California likely avoided Medicaid enrollment due to fears about their immigration status.

Conclusion: While our estimates are lower than those of previous studies, our findings highlight barriers to health care for immigrants despite the reversal of the changes in the public charge rule. Since the public charge rule was not abolished, immigrants with low incomes might choose not to seek health care, despite recent efforts in California to expand Medicaid coverage to all eligible immigrants regardless of documentation statuses.

 © 2022 Health Research and Educational Trust.

KEYWORDS
Asian Americans, disparities, health care access, health insurance, Hispanic or Latino, immigration policy, public charge

What is known on this topic

- Applications to Medicaid and other public programs declined among immigrants, even if eligible, due to the chilling effects caused by changes in the definition of a public charge.
- Changes to the definition of a public charge by the Trump administration expanded the share of noncitizen immigrants who could be considered a public charge from 3% to 47%.
- Twenty-five percent of noncitizen immigrants with a confidence interval of 15%–35%, avoided public benefit enrollment due to the changes in the definition of public charge.

What this study adds

- We estimated the avoidance of Medicaid enrollment due to potential fears of the public charge rule among Latino and Asian adult immigrants without green cards.
- This is the first study to use a statewide, population-based representative survey to estimate the avoidance of Medicaid among immigrants due to the changes in the public charge rule.
- Between 107,956 and 192,905 Latino immigrants and 1294 and 4702 Asian immigrants in California likely avoided Medicaid enrollment due to fears about their immigration status.

1 | INTRODUCTION

Changes to the "public charge" rule implemented in 2019 by the Trump administration expanded the criteria under which immigrants could be denied a visa or US permanent residency, known as a "green card," making it more difficult for immigrants to adjust their immigration statuses.[1] The 2019 changes to the public charge rule widened the 1999 public charge definition to include immigrants who received Medicaid, Supplemental Nutrition Assistance Program (SNAP) benefits, and housing assistance for more than 12 months.[2] Immigrants could also become ineligible for a visa or a green card if, at the time of application, they were deemed "likely" to become a public charge even if immigrants had not received public benefits.[3]

The 2019 definition of what constituted a public charge suddenly expanded the share of noncitizen immigrants who could be considered a public charge from 3% to 47%.[4] These changes disproportionately affected low-income immigrants and their family members who qualify for these entitlement programs.[5,6] Despite their eligibility, immigrants and mixed-status households (i.e., where at least one household member is an undocumented immigrant and at least one household member is a US citizen) faced the decision of choosing to disenroll or forgo applying for such benefits to avoid jeopardizing their future green card or immigration status.[1] In the face of fear, confusion, and misinformation, immigrants were discouraged from using health care and nutrition programs and other public benefits. This reaction to restrictive immigration policies is known as a "chilling effect," which is associated with changes in health care seeking behaviors.[7,8]

In March 2021, President Biden signed an executive order reversing the Trump administration's changes to the public charge rule.[9] Despite this reversal, fear and misinformation persist in immigrant communities, and the avoidance of public benefits enrollment continues.[10] The 1999 public charge rule remains in effect. The prospect of the reversal of Biden's executive action by a future presidential administration reminds immigrants that the recent reversal could easily be overturned through executive action or by the judiciary. At least 14 states have filed with the US Supreme Court to defend the widened definition of public charge enacted by the Trump administration.[11] The resulting chilling effects have important public policy implications for participation in public programs among immigrants and mixed-status households.

Previous research has examined the impact of chilling effects among immigrants after the implementation of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (also known as the Welfare Reform Act). These studies found that the number of applications to Medicaid and other public benefit programs declined among immigrants, even though many immigrants and their US-born children were still eligible for these programs.[12,13] More recently, studies have estimated the consequences of the 2019 changes to the public charge rule on health and health insurance eligibility.[7,8,14] Multiple studies have predicted that immigrant participation in public benefit programs would decline at similar rates to those observed after the implementation of the 1996 Welfare Reform Act.[12,13,15] Studies have shown that enrollment in public benefit programs declined among immigrants and their US-born children, even though the latter were not subject to the changes in the public charge rule.[5,16] One study even concluded that the single announcement of changes to the public charge rule in 2018 resulted in a decline of 260,000 US-born children who were covered by Medicaid.[6]

It has been estimated that the impact of chilling effects on Medicaid/CHIP enrollment could lead up to 2.1–4.9 million Medicaid/CHIP potential enrollees avoiding enrolling.[17] These figures were close to

the number of noncitizen immigrants who were estimated to have avoided public benefits enrollment during the COVID-19 pandemic.[8] Another study found that one in six immigrant adults discontinued their participation in noncash government programs in California for fear of it affecting their immigration statuses.[18] More recently, a study concluded that approximately 129,550 children in California, who live with at least one undocumented parent, could lose public benefit programs such as the Children's Health Insurance Program (CHIP) or SNAP due to immigration fears.[19]

A variable that is key to estimating the potential impact of changes to the public charge rule is permanent residence status, also known as a green card. The public charge rule only affects noncitizen immigrants without a green card. Large population surveys such as the American Community Survey (ACS) or the National Health Interview Survey (NHIS) classify immigrants as "citizen" or "noncitizen," and these surveys do not parse out noncitizen immigrants into green card and nongreen card holders. Most of the previous research on public charge, however, has used data sources that could potentially misclassify immigrants due to the lack of information on both citizenship and documentation status. Since the main barrier created by the public charge rule that is still in effect after Biden's executive action is in the stage of applying for a green card, new research needs to examine the lingering chilling effects associated with the avoidance of public benefit programs among immigrants. Importantly, studies should compare immigrants by green card status.

In this study, we estimate the avoidance of Medicaid enrollment among immigrants due to fears about their immigration status associated with the changes in the public charge rule among Latino and Asian adult immigrants without green cards. We focus on California because it is the state with the largest immigrant population subject to the public charge rule and where the largest source of reliable survey data about the green card status of immigrants is available. Immigrants in the state are overwhelmingly of Latino (50%) and Asian (34%) heritage.[20] Studies have shown that immigrants, especially undocumented immigrants, are less likely to have health insurance and to have access to and use health care.[21,22] To our knowledge, no study has estimated Medicaid avoidance due to fears about one's immigration status by race and ethnicity in relation to the changes in the public charge rule. California has recently proposed the expansion of Medicaid coverage to all low-income immigrants regardless of documentation status,[23] and research is needed to estimate how many immigrants would continue to avoid Medicaid despite their new eligibility in California.

Our study offers two contributions to the literature. The first contribution is the use of the California Health Interview Survey (CHIS), an annual multiyear statewide population-based representative survey that is the largest US survey that has consistently gathered green card status in California. Thus, our study can estimate the potential avoidance of Medicaid enrollment by parsing out noncitizen immigrants between green card and nongreen card holders. The second contribution is the analysis of the heterogeneous impacts of the chilling effects by race and ethnicity among immigrant populations. In this study, we examine differences in access to and use of health care between Latino and Asian adult immigrants, the two largest heritage groups of US immigrants, and we explore differences in the potential consequences of chilling effects in Medicaid enrollment associated with the Trump-era changes in the definition of the public charge rule among these populations.

2 | METHODS

2.1 | Data and Measures

We used pooled data from the 2017 to 2020 California Health Interview Survey (CHIS). CHIS is a representative survey of the civilian, noninstitutionalized population in California, the state where a quarter of all immigrants live in the United States.[24] CHIS data are collected in English, Spanish, and other languages.[25] Our study sample consisted of adults 18–64 years of age. We used 2017 as the first year in our pooled data since we assumed that the inflammatory anti-immigrant rhetoric during the 2016 campaign may have anticipated the chilling effects from changes made to the public charge rule. Our pooled sample includes up to 2020 since it was the last year when changes to the public charge rule were in effect.

To estimate the avoidance of Medicaid enrollment due to immigration fears, we used three different sources from the Urban Institute (described in Appendix S1), which analyzed findings from the Well-Being and Basic Needs Survey (WBNS).[16,18,26] WBNS is a nationally representative survey of adults ages 18–64 that collects information on health, material hardship, and wellbeing, and it includes information on individual and household use of public benefit programs. In 2019, the WBNS collected a subsample of California adult immigrants and adults who lived in households with at least one immigrant family member to study chilling effects linked to the use of entitlement benefit programs.[18]

Our study outcomes included seven dichotomous health care measures from CHIS. The first is health insurance coverage. Survey participants were asked whether they were currently insured. Another measure identified enrollees in the Medi-Cal program (California's Medicaid program). The access measure determined whether participants had a usual source of care other than the emergency department (ED). For utilization, we used two measures: (1) whether a participant had at least one physician visit during the previous year and (2) whether a participant had at least one ED visit during the previous year.

Participants were categorized by Latino/Hispanic and Asian heritage and by citizenship and green card status. Race and ethnicity were self-reported. We analyzed three mutually exclusive measures of citizenship and immigration status: (1) US citizens (reference group), (2) green card holders, and (3) nongreen card holders. The population of interest was nongreen card holders since they are the immigrant population targeted by the public charge rule. To parse out immigrants by green card status, participants answered the question, "are you a permanent resident with a green card." Additional explanatory variables in the analyses were age, gender, marital status, employment

status, federal poverty level (FPL), education, English language proficiency, years of US residence among immigrants, and self-reported health status.

2.2 | Statistical analyses

We used CHIS data to examine differences in health insurance coverage and access to and use of health care reported by Latino and Asian participants by green card status, with US citizens as the reference population. We first compared means for socioeconomic, demographic, and health care outcomes between Latino and Asian adults using chi-squared tests to compare US citizen versus green card holders, US citizen versus nongreen card holders, and green-card holders versus nongreen card holders. Multivariable logistic regression models were used to estimate differences in health insurance coverage, Medi-Cal (California's Medicaid program) enrollment, and access to and use of health care after controlling for the explanatory variables described above. We summarized the main outcomes using marginal effects to ease the interpretation of the main findings. The marginal effect models used UScitizen adults as the reference group. The analyses used survey weights and design variables to account for the complex survey design of CHIS. SAS and Stata16 were used for the statistical analyses.

To estimate the avoidance of Medicaid enrollment, we replicated a technique developed by immigration scholars to quantify the avoidance of public benefits enrollment due to fear of immigration status being affected.[14] Avoidance rates were estimated using findings from the WBNS, published by the Urban Institute, to determine the proportion of immigrants who reported avoiding public benefits. Medi-Cal avoidance was first estimated by identifying the number of immigrant adults who were enrolled in Medi-Cal and who could be at risk of Medi-Cal disenrollment due to immigration fears.[14] We parsed out Medi-Cal-enrolled immigrants with and without green cards. Immigrants without green cards enrolled in Medi-Cal were considered at risk of losing this public benefit since they are potentially subject to public charge regulations (See Appendix S1). The share of immigrants who reported avoidance in WBNS was subsequently used to estimate the number of immigrants likely to forgo such programs. In previous studies, the number of immigrants likely to avoid public benefits was estimated by multiplying the share of immigrants who reported avoidance in WBNS by the number of noncitizen immigrants receiving these benefits who were identified in a household survey such as the American Community Survey and assumed a range of up to 10% above and below the WBNS estimated share.[8,14] In our study, we estimated the number of immigrants likely to forgo public benefits by multiplying the share of immigrants who reported avoidance in WBNS by the number of immigrants without a green card who were enrolled in Medi-Cal according to CHIS and assumed a different range from smallest to largest expected avoidance rates by race and ethnicity. (See Appendix S1).

One innovation in our methodology was to define specific avoidance rates that would apply to Latino and Asian adults using different WBNS sources to study the heterogenous impact of the public charge rule by race and ethnicity among the immigrant populations.[16,18,26] We combined the methodological advantages from each of these analyses to build two scenarios that best fit Latino and Asian adult immigrants (See Appendix S1). To estimate the potential changes in Medi-Cal coverage due to immigration fears, we modeled two extreme scenarios using different public benefit avoidance estimates, a lower bound scenario that used the lowest avoidance figure from the WBNS either for Latino or non-Latino immigrants. Likewise, an upper bound estimate corresponded to the highest avoidance figure from the WBNS, either for Latino or non-Latino immigrants (See Appendix S1). In the case of Latino immigrants, the lowest avoidance rate was 12.2%, which corresponded to California participants who answered that they "had not applied or stopped participating in a noncash government benefit in 2019 due to immigration concerns."[18] The least conservative scenario was a national estimate from the WBNS, where 21.8% of adult immigrants reported that "someone in their family had not applied or stopped participating in a noncash government due to immigration concerns."[26] For Asian immigrants, the most conservative scenario was 6%, corresponding to non-Latino and non-White immigrant responses to public benefit avoidance, while the least conservative scenario was 21.8%.[16,26] We used these avoidance scenarios to estimate the number of nongreen card-holding adults who may have avoided Medi-Cal enrollment due to immigration fears.

3 | RESULTS

3.1 | Descriptive analysis

Table 1 shows the socioeconomic and demographic characteristics of Latino and Asian adult immigrants in California. Compared to 89.0% of Latino US-citizen participants with health insurance coverage, 81.1% of Latino immigrants with a green card and 60.8% of Latino immigrants without a green card had health insurance coverage. Latino immigrants without a green card were less likely to have health insurance coverage compared to Latino US citizens and green card holders, and the differences were significant ($p < 0.001$). Medi-Cal (Medicaid program of California) coverage rates were higher for Latino immigrants with a green card (44.3%) compared to Latino US citizens (30.3, $p < 0.001$). The Medi-Cal coverage rate among Latino immigrants without a green card was 39.0%.

In the case of Asian survey participants, 94.3% of US citizens, 90.6% of immigrants with a green card, and 82.4% of immigrants without a green card had health insurance coverage. Differences across these populations were statistically significant. Medi-Cal coverage rates were higher for immigrants with a green card (29.3%) compared to US citizens (16.8%, $p < 0.001$) and immigrants without a green card (7.3%, $p < 0.001$). Differences were also significant between immigrants with and without a green card ($p < 0.001$).

In terms of health care access and use among Latinos, Table 1 shows that immigrants without a green card (62.0%) and with a green card (71.5%) were less likely to have a usual source of care compared

TABLE 1 Sample characteristics of Latino and Asian adults in California by citizenship and green card status

Variable	Latinos						Asians					
	U.S. citizens (%)	Green card (%)	No green card (%)	P-V1	P-V2	P-V3	US citizens (%)	Green card (%)	No green card (%)	P-V1	P-V2	P-V3
Insured	88.7	81.1	60.8	***	***	***	94.3	90.6	82.4	**	***	**
Medi-Cal	30.3	44.3	39.0	***	***		16.8	29.3	7.3	***	***	***
USC	80.2	71.5	62.0	***	***	***	86.5	80.6	72.2	**	***	**
Physician visit	78.5	70.4	63.4	***	***	**	80.1	74.7	65.8	**	***	**
ED use	20.4	16.2	16.7		*		13.1	11.9	8.6			
Age	37.3	44.2	38.3	***	**	***	38.8	40.4	33.2		***	***
Male	50.0	49.5	51.9				47.6	47.5	42.7			
Married	51.1	71.7	64.9	***	***	**	54.9	68.5	60.5	***		
Employed	63.7	55.4	58.6	***	*		65.1	57.5	60.8	**		
Income (FPL)												
0%–100% FPL	19.2	26.3	41.3	***	***	***	9.1	16.7	14.7	**	**	
101%–200% FPL	21.0	37.0	32.6	***	***		12.2	18.7	8.9	***		***
201%–300% FPL	16.9	15.9	8.9		***	***	11.9	15.0	11.9			
301% FPL<	43.0	20.8	17.2	***	***		66.8	49.6	64.5	***		***
Education												
>High school	17.8	59.7	57.9	***	***		5.6	16.3	3.8	***		***
Health status												
Fair/poor	18.5	33.1	29.4	***	***		13.6	15.3	12.0			
Speaks English												
Not well/at all	8.4	59.4	61.3	***	***	***	9.0	33.9	15.3	***	**	***
Years in the United States												
<10	—	16.1	17.4				—	52.6	75.5			
10–15	—	9.3	18.5			***	—	16.3	13.4			
15<	—	74.6	64.1			***	—	31.1	11.0			***
N =	7,357,570	1,165,648	1,363,158				3,057,052	560,216	297,182			

Note: Medi-Cal is the Medicaid program of California. P-V1 = Differences in means between US citizens and green card holders. P-V2 = Differences in means between US citizens and nongreen card holders. P-V3 = Differences in means between green card and nongreen card holders.
Abbreviations: ED, Emergency Department; USC, usual source of care.
*$p < 0.05$**; $p < 0.01$; ***$p < 0.001$.
Source: California Health Interview Survey, 2017–2020.

to US citizens (80.2%, $p < 0.001$). Immigrants without a green card (63.4%) and with a green card (70.4%) were also less likely to have had a physician visit in the previous year compared to US citizens (78.5%, $p < 0.001$). For ED visits, Latino immigrants without a green card (16.7%) and with a green card (16.2%) were less likely to report having used the ED in the past year compared to US citizens (20.4%). Differences in ED use, however, were only significant between Latino US citizens and Latino immigrants with a green card ($p < 0.05$).

Among Asian participants, immigrants with a green card (80.6%) were less likely to have a usual source of care compared to US citizens (86.5%, $p < 0.01$). Differences with immigrants without a green card (72.3%) were also significant ($p < 0.001$). Likewise, immigrants with a green card (74.7%) were less likely to report a physician visit in the past year compared to US citizens (80.1%, $p < 0.01$), and differences for Asian immigrants without a green card (65.6%) were also significant ($p < 0.001$). The proportion of those who had an ED visit in the past year for immigrants with (11.9%) and without (8.6%) a green card was lower compared to US citizens (13.1%), but the differences were nonsignificant.

Socioeconomic and demographic characteristics in Table 1 show that Latino immigrants without a green card were more likely to be older, married, report an income under 200% FPL, not have a high school degree, report fair or poor health status, and lack English language proficiency compared to Latino US citizens ($p < 0.001$). By contrast, Asian immigrants without a green card were more likely to be younger and to report an income under 100% of the FPL compared to Asian US citizens. All other differences were nonsignificant. Interestingly, Asian immigrants with a green card (33.9%) were less likely to be proficient in English compared to Asian immigrants without a green card (15.3%), and this difference was significant ($p < 0.001$). Latino immigrants with (74.6%) and

without green cards (64.1%) were also more likely to have lived in the United States for more than 15 years, compared to Asian immigrants with (31.1%) and without green cards (11.07%).

3.2 | Predicted probabilities

Table 2 shows the average marginal effect models for differences in health insurance coverage and access to and use of health care for Latino and Asian immigrants by green card status using US citizen as the reference category. All marginal effect models control for socio-economic and demographic characteristics.

Latino immigrants without a green card were 23.1% less likely to have health insurance coverage, 9.2% less likely to be enrolled in Medi-Cal, 9.3% less likely to have a usual source of care, and 8.4% less likely to have a physician visit in the past year compared to Latino US citizens. All these differences were significant. Latinos with a green card were 4.8% less likely to have health insurance compared to Latino US citizens ($p < 0.01$), but all other differences were nonsignificant. Importantly, the marginal effect models show no significant differences in ED use in the past year among Latinos regardless of citizenship and green card status.

Asian immigrants without a green card were 11.7% less likely to have health insurance coverage, 8.9% less likely to be enrolled in Medi-Cal, 11.6% less likely to have a usual source of care, and 11.0% less likely to have a physician visit in the past year compared to Asian US citizens ($p < 0.01$). No significant differences were observed between Asian immigrants with a green card and Asian US citizens. The marginal effect models show no significant differences in ED use in the past year among Asians regardless of citizenship and green card status.

3.3 | Estimated avoidance of Medi-Cal enrollment

Our results in Table 3 show two different scenarios estimated from various surveys conducted by the Urban Institute that asked about the avoidance of Medicaid enrollment among Latino and non-Latino immigrants in California and at the national level. We tailored this technique developed by immigration scholars to the specific case of California and identified heterogenous avoidance rates between Latino and Asian immigrants (See Appendix S1). We estimated the number of immigrants likely to avoid Medi-Cal enrollment by multiplying the number of Latino immigrants without green cards who were enrolled in Medi-Cal (884,886) by the avoidance estimate (Table 3). According to our estimation, the more conservative scenario (12.2% avoidance) among Latino immigrants without a green card could have resulted in approximately 107,956 Latino immigrants avoiding Medi-

TABLE 2 Predicted probabilities of health care access and use among Latino and Asian adults in California by citizenship and green card status

	Latinos		Asians	
	Green card (95% CI)	No green card (95% CI)	Green card (95% CI)	No green card (95% CI)
Has insurance	−4.8 (−8.4, −1.3)**	−23.1 (−27.8, −18.4)***	−2.0 (−5.2, 1.2)	−11.7 (−19.7, −3.7)**
Medi-Cal	2.5 (−2.8, 7.9)	−9.2 (−12.8, −5.5)***	0.6 (−3.5, 4.7)	−8.8 (−11.6, −6.1)**
USC	−5.3 (−13.0, 2.4)	−9.3 (−14.5, −4.1)***	−5.0 (−10.5, 0.5)	−11.6 (−19.3, −3.9)**
Physician visit	−5.3 (−10.6, 0.0)	−8.4 (−13.2, −0.3)**	−3.5 (−9.8, 2.9)	−11.0 (−19.2, −2.8)**
ED use	−4.3 (−10.2, 1.7)	−4.2 (−8.1, 0.3)	1.0 (−4.7, 6.6)	2.6 (−8.4, 3.2)

Note: Average Marginal Effect models control for age, gender, marital status, employment status, education, income, self-reported health, years of US residence and English proficiency are shown for individuals who are immigrants with and without a Green Card compared to US citizens. US Citizen is the reference group. Medi-Cal is the Medicaid program of California.
Abbreviations: CI, confidence interval; ED, Emergency Department; USC, usual source of care.
*p < 0.05**; p < 0.01; ***p < 0.001.
Source: California Health Interview Survey, 2017–2020.

TABLE 3 Avoidance of Medi-Cal enrollment due to immigration fears among Latino and Asian adults in California without a green card

Avoidance rates	US citizen w/Medi-Cal	Green card w/Medi-Cal	No green card w/Medi-Cal	More conservative	Less conservative
Latinos				12.2%	21.8%
Adults 18–64 years	2,227,974	516,358	884,886	107,956	192,905
Asians				6.0%	21.8%
Adults 18–64 years	513,081	163,963	21,570	1294	4702

Note: Avoidance rates estimated among NonGreen Card holders enrolled in Medi-Cal, the population subject to public charge rules. Avoidance rates were estimated from analyses of the 2018 and 2019 Well-Being and Basic Needs Survey estimated by the Urban Institute. Medi-Cal is the Medicaid program of California.
Source: California Health Interview Survey, 2017–2020.

Cal enrollment due to fears of their immigration status being affected. The less conservative scenario (21.8% avoidance) could have resulted in 192,905 Latinos avoiding Medi-Cal enrollment (Table 3). Likewise, we replicated this estimation using the number of Asian immigrants without green cards who were enrolled in Medi-Cal (21,570), multiplying this number by the avoidance rate (Table 3). The corresponding figure for Asian immigrants without a green card in the more conservative scenario (6.0% avoidance) is 1294 potential Asian immigrants avoiding Medi-Cal enrollment. The less conservative scenario (21.8% avoidance) could have resulted in 4702 Asian immigrants avoiding Medi-Cal enrollment due to fears of their immigration status being affected (Table 3).

4 | DISCUSSION

Previous studies have estimated that millions of noncitizen immigrants and their US born children have avoided enrollment in public benefit programs, such as Medicaid, because of restrictive immigration policies, such as the 1999 public charge rule that is still in effect. These fears were exacerbated in 2018 when the Trump administration included Medicaid as one of the entitlement benefit programs that was subject to a green card denial under an expanded definition of the public charge rule. Despite the Biden administration's reversal of these changes, immigrants are still fearful that their use of public benefits could compromise their future application for a green card or a visa. Our study provided a new way of estimating the potential avoidance of Medicaid enrollment by focusing on nongreen card holders instead of all noncitizen immigrants and estimating specific avoidance rates for Latino and Asian immigrants to account for the heterogeneous impact of immigration fears across race and ethnicity.

In contrast with previous studies that have estimated the avoidance of Medicaid enrollment due to immigration fears, our estimates were lower than estimates calculated by previous studies for two reasons. Previous research estimated the potential avoidance of Medicaid enrollment for all noncitizen adults and their US-born children eligible for public benefits. In our study, we parsed out noncitizen adult immigrants by green card status. This distinction is important because the public charge rule is only applicable to noncitizen immigrants without a green card. Our results showed that in California, the number of green card holders enrolled in Medi-Cal is very similar to that of nongreen card holders among Latino immigrants. The number of green card holders enrolled in Medi-Cal among Asian immigrants, however, is more than seven times the number of nongreen card holders. These figures suggest that including green card holders eligible for public benefits in our calculation, as has been done in previous research,[8,14] would have more than doubled the estimated number of immigrant adults who avoided Medicaid.

A second reason why our estimates were lower than previous studies is that we used different avoidance rates applicable to Latino and non-Latino immigrants in California and nationwide estimated by the Urban Institute. The avoidance ranges that we used are lower compared to previous studies that applied the same rate to all immigrants regardless of the state of residence or race and ethnic background. California has a more inclusive immigration environment that could likely lead to lower avoidance rates compared to other states with exclusionary policies. Thus, our estimation offers a novel and more precise way of quantifying the potential avoidance of Medicaid enrollment due to fears of immigration statuses being affected.

Our study also examines differences in race/ethnicity among immigrants to study the differential impact of Medicaid avoidance due to immigration fears. We analyzed the two largest immigrant populations, Latinos, and Asians, in California. We found that estimated avoidance rates are more concentrated among Latino immigrants, which can be related to socioeconomic and demographic differences between Latino and Asian immigrants. Latino immigrants without a green card are more likely to have lower incomes, lack a high school degree, and not be proficient in English compared to Asian immigrants without a green card. Latino immigrants are also more likely to have lived in the United States for more than 15 years compared to Asian immigrants. Consequently, the number of eligible Latino immigrants without a green card who enrolled in Medi-Cal was 40 times as large as the number of eligible Asian immigrants without a green card. Our findings suggest that socioeconomic and demographic characteristics and the overall distribution of the population by green card status and Medi-Cal eligibility can partly explain the difference in the number of Latino and Asian immigrants who could have avoided Medicaid enrollment due to fears of their immigration statuses being affected.

Interestingly, despite the relatively large number of Latino immigrants without a green card who were enrolled in Medi-Cal, our marginal effects estimates still show important deficits in terms of access to and use of health care. Latino immigrants without a green card were significantly less likely to have a usual source of care or a physician visit compared to Latino US citizens. In contrast, differences in terms of access to and use of health care between Latinos with a green card and US citizens were nonsignificant. Likewise, our marginal effects estimates showed significant differences by citizenship or green card status among Asian adults in California, except for ED use, where differences were nonsignificant.

These findings are likely related to the socioeconomic and demographic differences that our study highlights between the Latino and Asian immigrant populations, which are more widespread among immigrants without a green card. The worse patterns of health care access and utilization among Latino immigrants without a green card are more likely to amplify the pervasive impact of Medicaid avoidance due to fears of having one's immigration status affected. Avoidance of Medi-Cal coverage and lower access to and use of health care among Latino immigrants may partly explain why 29% of Latinos without a green card reported fair or poor health, which was more than twice the share of Asian immigrants without a green card.

Our findings highlight the vulnerability of immigrants without a green card, as they may lose their usual source of care, refrain from seeking health care services, and forgo care. This situation can become particularly harmful as the United States faces COVID-19, which has disproportionately affected Latinos in California.[27] The potential return to the 2019 expanded public charge rule due to executive action or a

judiciary decision is likely to worsen the existing health inequities between immigrants without a green card and those with a green card or US citizenship. The chilling effects would aggravate existing health inequities that stem from citizenship, migratory status, and ethnicity. In addition, they could discourage individuals from seeking care even in the presence of COVID-19 symptoms and further worsen inequities.

Exclusionary immigration policies, such as the public charge rule, could have both short- and long-term effects on the health and well-being of immigrants, particularly those without a green card. Considering how little information exists about the implications of Medicaid avoidance due to fears about immigration statuses being affected, our study provides useful and timely evidence for the ongoing debate about the impact of immigration policies that aim to restrict public benefit use among immigrants and their implications on access to and use of health care.

In 2021, California expanded Medi-Cal to undocumented Californians aged 50 and over, with plans of expanding to all undocumented immigrants in California by 2024.[23] As California expands Medi-Cal eligibility to a large share of its immigrant population, policy makers should be mindful that fears about immigration consequences of Medi-Cal enrollment could continue to deter enrollment. Given the ongoing confusion and mistrust among immigrant populations without a green card, the expansion of Medi-Cal in California should be accompanied by a robust public information campaign deployed by trusted messengers to clarify to vulnerable households the benefits of enrolling. Dispelling disinformation will help immigrant families regain trust in the health care system.

4.1 | Limitations

We estimated two different Medicaid avoidance scenarios based on responses to previous surveys. These estimates, however, are self-reported, and real behavior may differ. Following previous research in this area, our analyses assumed that study participants did not avoid Medicaid enrollment before the survey period (2017–2020). If avoidance of public benefits had occurred earlier, our study findings would have underestimated the numbers of immigrants who avoided enrollment because of fears of their immigration status. Although the use of green card status is a more precise method to estimate potential Medicaid avoidance rates among adult immigrants, it has some limitations. A few immigrants with green cards and naturalized citizens may be unaware that public charge rules do not apply to them. Our study focuses on adults ages 18–64 years, so it excludes children and older adults living in mixed-status households who may be subject to chilling effects. Thus, our estimation of Medicaid avoidance should be interpreted as a lower bound of the potential number of adult immigrants who experienced chilling effects.

We did not include Black or non-Latino White immigrants in the study since the analyses would be underpowered for immigrants without a green card in these populations. We used a pooled cross-sectional design, which limits the identification of year-on-year changes in population flows.[8,14] In addition, as in any observational study, self-reported measures are subject to recall bias. Our method for identifying green card status was based on reports of having permanent resident status or being a US citizen, which may lead to some misclassification. Studies investigating the magnitude of this misclassification in CHIS, however, have found it to be within acceptable margins and homogenous across survey years.[28] While California has the largest immigrant population in the United States, the study findings are applicable to this state, and the external validity is limited to other states where immigration environments and policies may differ.

5 | CONCLUSIONS

The Biden administration's reversal of the Trump administration's changes to the public charge rule was a critical first step to addressing the fears of immigrants to public benefits enrollment. However, more needs to be done to combat mistrust of the health care system and insurance enrollment, particularly Medicaid enrollment. Even before the Trump administration expanded the definition of public charge to include recipients of Medicaid and SNAP, many immigrants and their US-born children disenrolled from entitlement benefits for fear of becoming ineligible for a green card. The effects of the public charge rule and related exclusionary immigration policies continue to be associated with health care inequities among immigrants. Future research should study whether the societal costs of the current public-charge rule in terms of reduced immigrants' access to health care are worth paying in the long term.

ACKNOWLEDGMENTS

This work was supported in part by a grant to Dr. Arturo Vargas Bustamante from the Commonwealth Fund [20202800] and by the UCLA Latino Policy and Politics Institute (LPPI). The authors' views and recommendations do not necessarily represent those of LPPI or the Regents of the University of California. Dr. Alexander N. Ortega was supported by a grant from the National Institute on Minority Health and Health Disparities (NIMHD) at the National Institutes of Health (NIH; R01 MD014146).

ORCID

Arturo Vargas Bustamante https://orcid.org/0000-0003-0414-5015

REFERENCES

1. Kaiser Family Foundation. Changes to "Public Charge" inadmissibility rule: implications for health and health coverage. Washington DC, 2019.
2. Immigration and Naturalization Services. Field guidance on deportability and inadmissibility on public charge grounds. Washington DC: Department of Justice. 1999.
3. Department of Homeland Security. Inadmissibility on the grounds of public charge. Washington DC: Federal Register. 2019.
4. Batalova J, Fix M, Greenberg M. Chilling effects: the expected public charge rule and its impact on legal immigrant families' public benefit use. Washington DC: Migration Policy Institute. 2018.

5. Wong T, Cha J, Villarreal-Garcia E. The impact of changes to the public charge rule on undocumented immigrants living in the U.S. San Diego, CA: U.S. Immigration Policy Center. 2019.
6. Barofsky J, Vargas A, Rodriguez D, Barrows A. Spreading fear: the announcement of the public charge rule reduced enrollment in child safety-net programs. *Health Aff*. 2020;39(10):1752-1761. doi:10.1377/hlthaff.2020.00763
7. Friedman AS, Venkataramani AS. Chilling effects: US immigration enforcement and health care seeking among Hispanic adults. *Health Aff*. 2021;40(7):1056-1065. doi:10.1377/hlthaff.2020.02356
8. Touw S, McCormack G, Himmelstein DU, Woolhandler S, Zallman L. Immigrant essential workers likely avoided Medicaid and SNAP because of a change to the public charge rule. *Health Aff*. 2021;40(7):1090-1098. doi:10.1377/hlthaff.2021.00059
9. House TW. Executive order on restoring faith in our legal immigration systems and strengthening integration and inclusion efforts for New Americans. Washington DC. 2021.
10. Bustamante AV, Diaz S. Can changing the public charge rule improve the health and lives of children? Advancing health equity. New York, NY: The Commonwealth Fund. 2021.
11. States SCotU. Application for Leave to Intervene and for a Stay of the Judgment Issued by the United States District Court for the Northern District of Illinois. 20A. Washington DC. 2019.
12. Fix M, Passel JS. Trends in noncitizens' and citizens' Use of Public Benefits Following Welfare Reforms: 1994–97″. Washington DC: Urban Institute, 1999.
13. Kandula NR, Grogan CM, Rathouz PJ, Lauderdale DS. The unintended impact of welfare reform on the medicaid enrollment of eligible immigrants. *Health Serv Res*. 2004;39(5):1509-1526. doi:10.1111/j.1475-6773.2004.00301.x
14. Zallman L, Finnegan KE, Himmelstein DU, Touw S, Woolhandler S. Implications of changing public charge immigration rules for children who need medical care. *JAMA Pediatr*. 2019;173:e191744. doi:10.1001/jamapediatrics.2019.1744
15. Zimmermann W, Tumlin KC. Patchwork policies: state assistance for immigrants under welfare reform. Washington DC: The Urban Institute. 1999.
16. Bernstein H, Gonzalez D, Karpam M, Zuckerman S. One in seven aduts in immigrant families reported avoiding public benefit programs in 2018. Washington DC: Urban Institute. 2019.
17. Artiga S, Garfield R, Damico A. Estimated impacts of the proposed public charge rule on immigrants and Medicaid. Henry J. Kaiser Family Foundation. 2018.
18. Bernstein H, Gonzalez D, McTarnaghan S, Karpman M, Zuckerman S. One in six adults in California immigrant families reported avoiding public benefits in 2019 Urban Institute. Washington DC: Urban Institute. 2020.
19. Guerrero A, Felix L, Dominguez R, Bustamante AV. Foregoing healthcare in a global pandemic: the chilling effects of the public charge rule on health access among children in California. Los Angeles, CA: UCLA Latino Policy & Politics Initiative. 2021.
20. Bustamante AV, Chen J, Felix Beltran L, Ortega AN. Health policy challenges posed by shifting demographics and health trends among immigrants to the United States. *Health Aff*. 2021;40(7):1028-1037. doi:10.1377/hlthaff.2021.00037
21. Bustamante AV, Chen J, McKenna RM, Ortega AN. Health care access and utilization among U.S. immigrants before and after the affordable care act. *J Immigr Minor Health*. 2018;21(2):211-218. doi:10.1007/s10903-018-0741-6
22. Ortega AN, McKenna RM, Kemmick Pintor J, et al. Health care access and physical and behavioral health among undocumented Latinos in California. *Med Care*. 2018;56(11):919-926. doi:10.1097/MLR.0000000000000985
23. The State of California. Governor's budget 2022–23: summary. In: Office Gs, ed. Sacramento, CA, 2022.
24. Budiman A. Key findings about U.S. immigrants. Washington D.C.: Pew Research Center. 2020.
25. CHIS. California health interview survey. Survey methodology. 2018.
26. Bernstein H, Gonzalez D, Karpman M, Zuckerman S. Amid confusion over the public charge rule, immigrant families continued avoiding public benefits in 2019. Washington DC: Urban Instiute. 2020.
27. Martinez LE, Balderas-Medina Y, Bustamante AV, Diaz S, Hayes-Bautista D. California's physician shortage during COVID-19: a policy roadmap to expand access to care. Los Angeles, CA: UCLA Latino Policy & Politics Initiative. 2020.
28. Viana J. When they answer, should we listen? Examining the quality of self-reported citizenship and immigration status. University of California, Los Angeles. 2018.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Bustamante AV, Félix-Beltrán L, Nwadiuko J, Ortega AN. Avoiding Medicaid enrollment after the reversal of the changes in the public charge rule among Latino and Asian immigrants. *Health Serv Res*. 2022;57(Suppl. 2):195-203. doi:10.1111/1475-6773.14020