



How Did Immigrants Fare During Medicaid Unwinding?

A 10-State County Level Analysis

Jeremy Barofsky and Lee-Sien Kao

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Executive Summary

Early in the COVID-19 pandemic, Congress worried that millions would lose health insurance during an unprecedented health and economic crisis. To combat this, states were allowed to keep people continuously covered by Medicaid until the end of the public health emergency, ensuring families had consistent access to healthcare. Enrollment increased substantially as a result. Congress ended this policy in December 2022, and starting April 1, 2023, states had up to 14 months to determine whether all people currently covered by Medicaid remained eligible for health coverage. State efforts to redetermine eligibility for all enrollees after continuous coverage ended became known as Medicaid “unwinding.” Researchers estimated that up to 7 million people could lose their healthcare coverage because of administrative errors and barriers to verifying eligibility, even though they remained program eligible (ASPE 2022).

Since unwinding began, more than 20 million people have been disenrolled from Medicaid coverage. For a host of reasons, immigrant families are more vulnerable to losing coverage during the unwinding process, even when they remain eligible for Medicaid. These include language barriers, confusion about eligibility rules, and lingering fear that Medicaid enrollment could jeopardize their immigration status (PIF 2024) or that Medicaid could share their information with immigration enforcement agencies.

The Protecting Immigrant Families (PIF) coalition and ideas42 have partnered to inform policy and practice reforms aimed at improving health and health equity by estimating how immigrant communities have fared during Medicaid unwinding. Because of the policy relevance of this topic and the lack of available data at the individual level, we use county-level data in 10 states, which represent 50% of the U.S. population, to compare how Medicaid enrollment changed from January 2022 to December 2023 in counties with high- versus low-immigrant population shares. To make this comparison, we use model-based adjustments for differences in unwinding timing across states as well as economic conditions across states. Using these results, we rank state performance in mitigating Medicaid coverage losses among immigrants.

We estimate that Medicaid unwinding in the 10 states we analyzed resulted in more coverage losses for people in counties with higher- compared to lower-immigrant population shares. ***Virtually all counties experienced declines during unwinding, but we find that the rates of decline in higher immigrant share counties led to an estimated 1.37 million more people losing Medicaid coverage compared to the lowest immigrant share counties.*** Texas was ranked worst for declines in Medicaid coverage in higher immigrant counties, followed by Florida and Colorado with the second and third worst performance. North Carolina, New York, and California performed the best to mitigate the negative effects of unwinding in immigrant counties, but still experienced declines in Medicaid coverage. We conclude by describing significant differences in state policies and practices related to unwinding that affected coverage losses and recommend the implementation of best practices to reduce future coverage losses among immigrants.

Background

At the start of the COVID-19 pandemic, Congress passed the Families First Coronavirus Response Act, which allowed states to keep individuals continuously covered by Medicaid until the end of the public health emergency, ensuring families had consistent access to healthcare. As a result, Medicaid enrollment increased by 20 million people since February 2020 to a peak of 94.4 million enrollees in 2023 (KFF 2024). Starting April 1, 2023, this provision ended and states had up to 14 months to determine if all Medicaid enrollees were eligible for health coverage. Researchers estimated that up to 15 million people could lose Medicaid coverage overall, and 7 million people could lose their healthcare because of administrative errors and barriers to verifying eligibility, even though they remained program eligible (ASPE 2022).

As of April 18, 2024, 20.3 million Medicaid enrollees have been disenrolled (KFF 2024), with wide variation across states. Utah has disenrolled 57% of individuals processed, while Maine has disenrolled only 12%, as of April 2024. Across all states, 69% of those disenrolled had their coverage terminated for procedural reasons, meaning they did not begin or finish the renewal process required to determine their current eligibility status for Medicaid (KFF 2024). Procedural disenrollments can occur for a range of causes: states may not have a family's correct address or individuals cannot understand the renewal forms or finish them before the state-imposed deadline. Policies used to mitigate declines in Medicaid coverage during unwinding have varied substantially across states for both intentional reasons as well as limits to state capacity given the administrative challenge unwinding represents. Policy differences include variation in when states started unwinding, how much automated re-enrollment they use, and whether they extend continuous coverage to children. An example of an administrative [error](#), which shows the limits in state capacity: 29 states and Washington, D.C., automatically disenrolled up to half a million children using the wrong income threshold in 2023 (Messerly 2023).

For a host of reasons, immigrant families are more vulnerable to losing coverage during the unwinding process, even when they remain eligible for Medicaid. These reasons include language barriers, confusion about eligibility rules, and lingering fear that Medicaid enrollment could jeopardize their immigration status (PIF 2024). Another barrier for immigrants is worries that Medicaid could share their information with immigration enforcement agencies. These fears were heightened during the Trump administration's yearslong campaign to expand the public charge rule as well as sow fear generally among immigrants and their families for using government programs. Previous research and the lived experience of immigrant families indicates these fears reduced enrollment in safety-net programs and remain today (Barofsky et al. 2020, Bernstein et al. 2022) even though the public charge rule no longer applies to the use of programs such as Medicaid, SNAP, or housing assistance.

The Protecting Immigrant Families (PIF) coalition and ideas42 have partnered to inform policy and practice reforms aimed at improving health and health equity by estimating how immigrants have fared during unwinding. Because of the massive undertaking that Medicaid unwinding represents, it constitutes an important test of whether the unique barriers faced by immigrant families led to larger declines in Medicaid access in counties with large immigrant shares. Since individual-level data is not currently available, we used county-level data to investigate whether Medicaid coverage is declining more in high- compared to low-immigrant share counties. This report provides an overview of the results of our analysis.

Analysis

We analyzed county-level monthly Medicaid enrollment across 10 states: Arizona, California, Colorado, Florida, Michigan, New Jersey, New York, North Carolina, Pennsylvania, and Texas. States were included because they were the 10 largest states that report county-level Medicaid enrollment for our dates of interest. **The 10 states have large populations (49.6% of the U.S. population) and disproportionately large immigrant populations (67.7% of the foreign born population in the U.S.).**ⁱ Enrollment data covers from January 2022 through December 2023 with a few exceptions noted in the appendix.ⁱⁱ

To investigate how Medicaid coverage is changing in immigrant counties during unwinding, we separate counties into the following groups based on their foreign-born population share: lowest (immigrants account for 4% of county population), low (10% of county population), middle (16%), high (25%), and highest (36%) foreign-born population shares across our 10-state sample. Each group of counties represents 20% of the population in our 10-state sample. When referring to immigrant share, we mean the proportion of a county's population that is foreign born, which includes naturalized citizens. Figure 1 shows the 10 states we collected data from and how each county within these states is coded based on their immigrant population share. [Appendix table A1](#) summarizes the data used and [appendix table A2](#) provides descriptive statistics by county immigrant-share group.

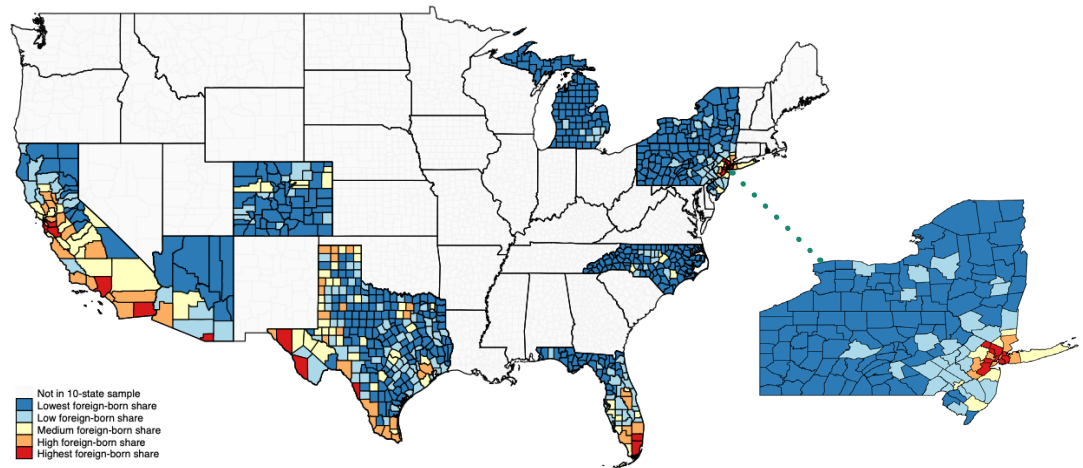
Then, we calculate the change in Medicaid enrollment after unwinding in the 10 states analyzed, comparing coverage changes in counties with high- compared to low-immigrant population shares using differences-in-difference models. The outcome is county-level Medicaid enrollment as a percentage of county population. Controls are included to adjust for state and year average Medicaid enrollment as well as each county's economic conditions, as proxied by unemployment level. The model tells us how much more Medicaid enrollment declines in the highest-, high-, medium-, and low-immigrant share counties compared to the lowest-share counties, while adjusting for the controls mentioned above. In other words, the model provides an estimate of county Medicaid disenrollment in each immigrant share group in excess of the disenrollment that would have occurred if a county was in the lowest-immigrant share category.

To measure state performance during unwinding, we use the excess decline in Medicaid enrollment by county group obtained from our regression model and apply that to all counties in our sample. Second, we sum the excess decline in Medicaid enrollment by county for each state. Third, because states vary in their immigrant population size, we adjust for that by dividing excess disenrollment by each state's immigrant population. Finally, to correct for variation in how states mitigated coverage losses during unwinding, we adjust excess disenrollment among immigrants by the ratio of each state's Medicaid enrollment decline compared to the average decline across the 10 states. **This assumes only that states doing worse for all Medicaid enrollees will do worse for immigrants, at the same rate.** These steps yield our measure of state performance for immigrants during unwinding, which represents each state's excess disenrollment among immigrants as a proportion of that state's immigration population. See section "Additional Description of Methods," [table 4](#), and [table A3](#) in the appendix for more details.

ⁱ Using data from the 2021 American Community Survey.

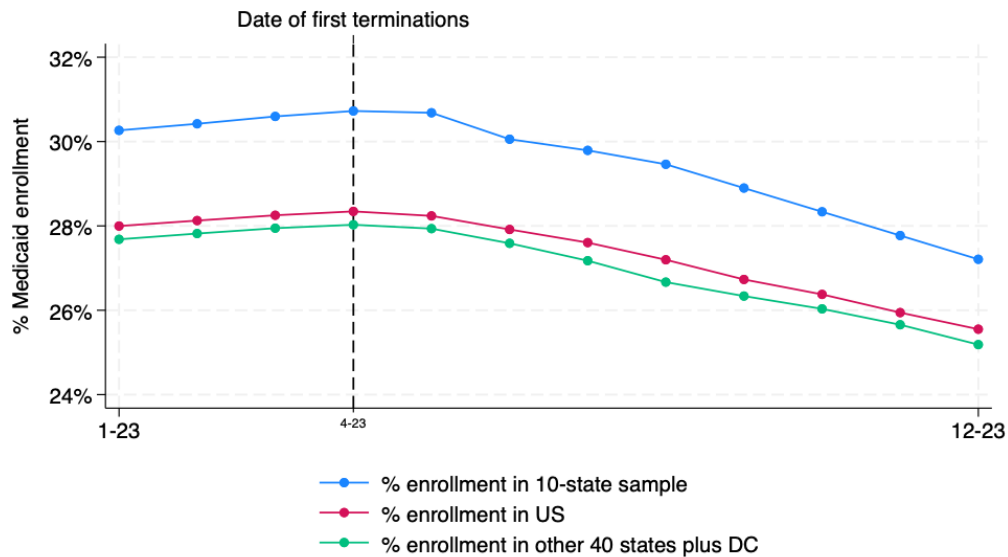
ⁱⁱ All enrollment data were obtained from publicly posted datasets on state government websites. All datasets are up-to-date as of February 14th, 2024. Nationwide enrollment data are sourced from the [Kaiser Family Foundation](#) (KFF), using November 2023 numbers for December 2023 (available as of 3/1/24). For Texas, September and October 2023 data were obtained through an open records request, and December data were calculated based on state-wide totals from KFF. All numbers are final with the exception of the following datasets which are marked as preliminary: California (February 2023 through December 2023) and Texas (July through November 2023). Four states include their CHIP program in their reported Medicaid enrollment counts, two report partial CHIP enrollment, and five either do not include CHIP or do not specify whether they do (see appendix for details). For additional details, see Methods below.

Figure 1: States used in our analysis with their counties coded by foreign-born population share.



Findings

Figure 2: Medicaid Enrollment (%), January 2022 to December 2023

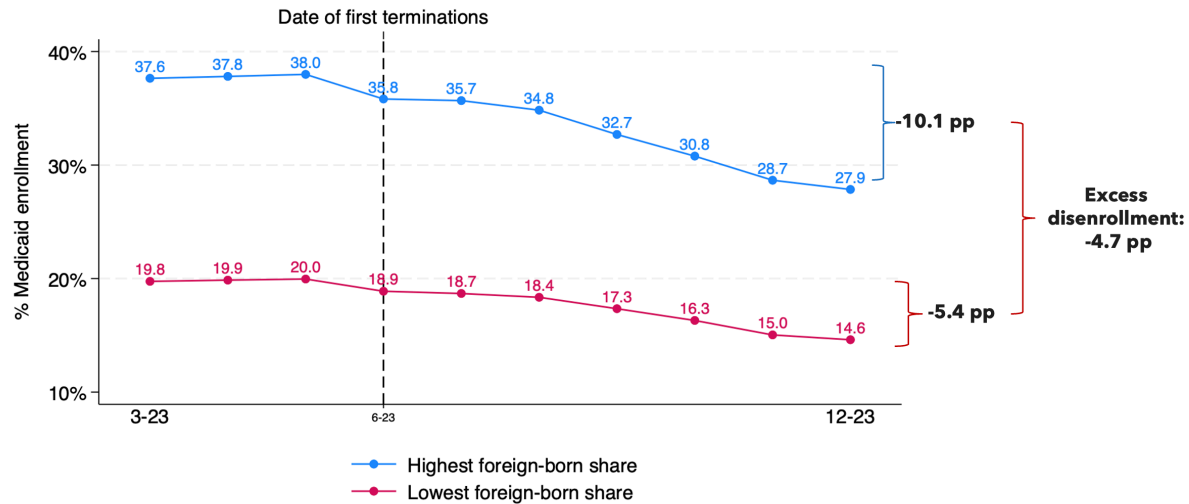


Note: Dec. 2023 data interpolated for Texas

Figure 2 shows Medicaid enrollment as a percent of total population for the 10-state sample we analyze using the administrative data we collected. It also shows Medicaid enrollment data from the Kaiser Family Foundation for the other 40 states plus Washington, D.C., and all 50 states. We observe that all states experience Medicaid enrollment losses after Medicaid unwinding begins. In our 10 state sample, Medicaid enrollment peaks at 31% of the population and declines by 3 percentage points in December 2023. In the other 40 states, participation peaks at 28% and declines to 26%. Also, Medicaid participation is higher in our 10-state sample by about 2 to 3 percentage points compared to the rest of the U.S.

Figure 3: Unadjusted Medicaid enrollment as a percent of population by county immigrant share in Texas and California, March 2023 to December 2023

Panel A: Texas



Panel B: California

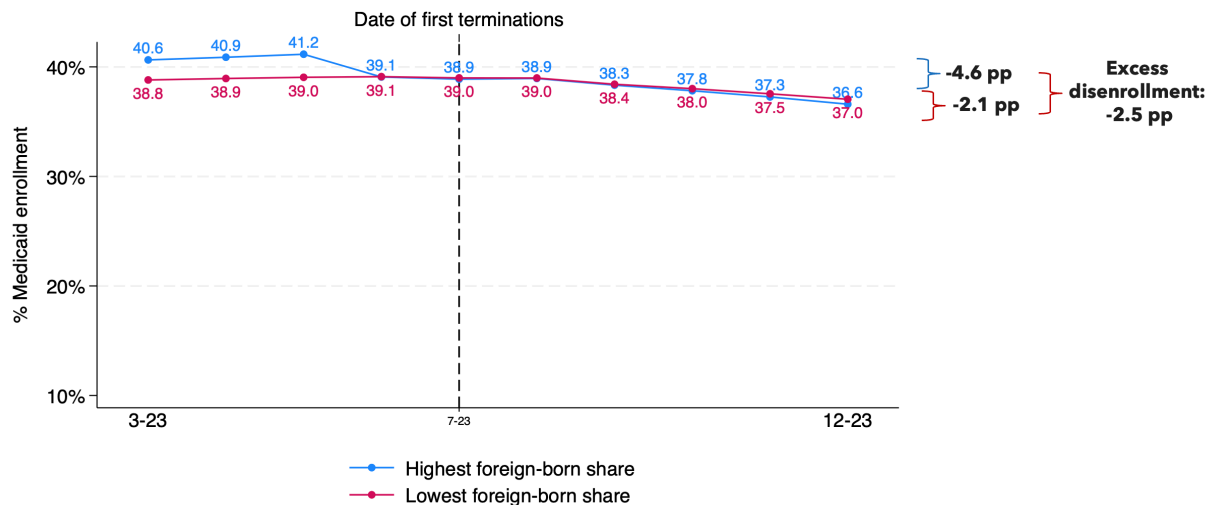
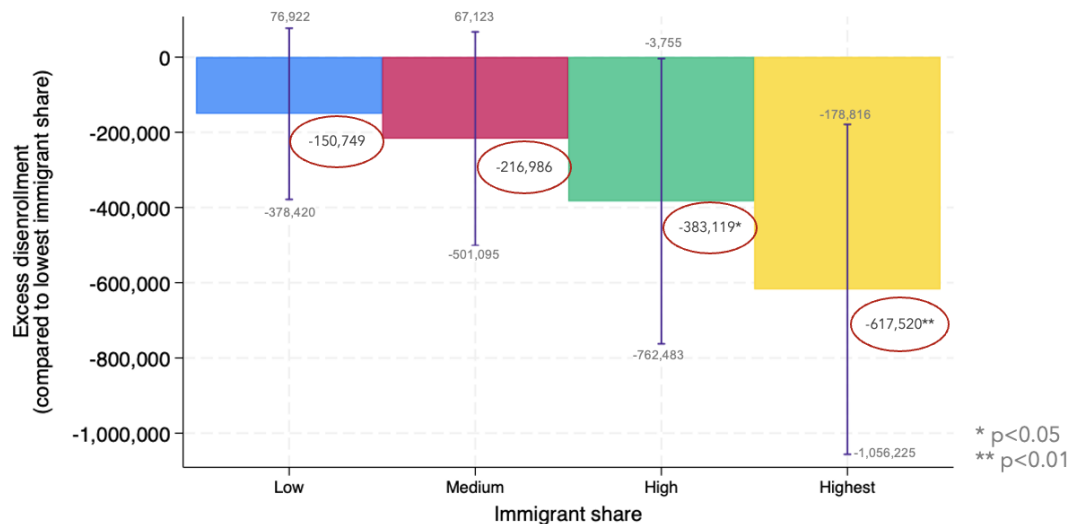


Figure 3 plots Medicaid enrollment for the highest and lowest immigrant share counties in the two largest states: California and Texas. We observe that unwinding reduced Medicaid participation in both types of counties in both states. However, for each one, state policies reduced enrollment more in immigrant dense counties compared to the lowest immigrant share counties. For Texas, the highest immigrant share counties experienced a decline of 10.1 points compared to 5.3 for the lowest share counties. In California, the highest immigrant share counties experience a decline of 4.6 points compared to 2.1 for the lowest share counties.

Figure 4: Excess Medicaid disenrollment by county when compared to counties in the lowest immigrant share counties



Note: Each bar shows the estimated excess number of people that lost Medicaid coverage in each immigrant-share county group compared to counties with the lowest immigrant population share.

Figure 4 summarizes our regression-adjusted results across groups of counties based on their immigrant share. In aggregate, for counties in the highest, high, medium, and low immigrant share groups, we find that state policies decreased Medicaid enrollment by 1.37 million people. This breaks down to the largest enrollment decline—about 620,000—occurring in the highest immigrant share counties. An additional 383,000 people lost coverage in counties within the high immigrant share category. Excess disenrollment in medium and low immigrant share counties compared to the lowest immigrant share counties was 217,000 and 150,000, respectively. [Appendix table A4](#) provides full model results.

Using these findings, [Table 1](#) summarizes our calculations on excess Medicaid disenrollment by state for counties with higher immigrant population shares. Column 2 shows the excess decline in Medicaid enrollment among immigrants across states and column 3 shows that change as a percentage of the state's foreign born population. The latter is our measure of state performance in minimizing coverage losses for immigrants during unwinding.

Table 1: Summary of the number of additional people that lost Medicaid coverage in counties with higher immigrant population shares per state and over the 10-state sample

State	Excess decline in Medicaid enrollment	Excess decline as a percentage of foreign-born population
[1]	[2]	[3]
TX	-461,644	-9.4%
FL	-263,784	-5.9%
CO	-31,885	-5.8%
AZ	-39,924	-4.3%
NJ	-80,822	-3.8%
PA	-31,302	-3.4%
MI	-22,935	-3.3%
CA	-316,993	-3.0%
NY	-110,159	-2.4%
NC	-8,927	-1.1%
10-state sample	-1,368,374	-4.5%

Note: Table shows the number of additional people that lost Medicaid coverage in counties with higher immigrant population shares per state and over the 10-state sample because of each state's Medicaid unwinding implementation policies.

Our analysis finds that state policies generated excess Medicaid disenrollment of 1.37 million people in our 10 states. If we restrict our calculation only to counties in the highest or high immigrant share categories, state actions reduced Medicaid coverage by 1 million or 73% of the total excess decline found compared to the lowest share counties. The 1.37 million excess decline in Medicaid coverage in immigrant communities represents almost 25% of the total decline in Medicaid enrollment of 5.6 million experienced across the 10 states.

Our measure of state performance can be found in column 3 of table 1: the reduction in Medicaid coverage attributable to immigrant counties adjusted by state performance during unwinding and state noncitizen population. We observe that Texas stands out as the worst, experiencing a coverage reduction in immigrant communities, equal to 9.4% of the state's foreign-born population. Florida ranks second to worst with an excess coverage decline in immigrant communities equal to almost 6% of its foreign-born population, but Colorado does almost as poorly with a similar 6% decline. At the other end of the rankings, North Carolina is measured to do the best, with a decline in immigrant communities equal to 1% of its immigrant population. New York and California are ranked second and third best, respectively, with excess Medicaid coverage declines in immigrant communities of 2.4% and 3% of their immigrant population.

Findings Summary

In the 10 states analyzed:

1. 1.37 million more people lost Medicaid coverage in higher immigrant-share counties compared to what would have occurred if they were in the lowest immigrant-share counties.
2. Texas experienced the largest excess disenrollment rate for immigrant families, followed by Florida and Colorado.
3. North Carolina, New York, and California were states that performed the best to mitigate the negative effects of unwinding on immigrant families, but still experienced declines in coverage.

Policy Recommendations

Our analysis confirms that people who live in higher immigrant share counties were more likely to lose Medicaid coverage during unwinding. These results remain important even as the unwinding period ends, because Medicaid renewals will continue every six months or annually, for most people enrolled in the program. For advocates, our results show their concerns were well-founded when it comes to disproportionate harm to immigrant communities during Medicaid unwinding. Moreover, although these findings cannot tell us anything conclusive about other states, responsible policymakers in states like Georgia, Illinois, Massachusetts, or Washington, with large immigrant populations should understand that the results we find are likely to apply in their states as well.

In addition to state performance, states also varied substantially in the policies they instituted to mitigate coverage losses. We summarize this variation for policies that affect immigrant communities in [tables 2 and 3](#). [Table 2](#) displays data collected by PIF that ranks states based on their use of policy best practice to mitigate Medicaid coverage losses among immigrants during unwinding, and [table 3](#) summarizes differences in Medicaid coverage for immigrant families.ⁱⁱⁱ

[Table 2](#) displays letter grades from a PIF survey of state advocates on states' performance addressing barriers facing immigrant families. The survey measured policies such as whether states addressed public charge concerns in renewal communications or asked for potentially sensitive and unnecessary data related to citizenship status. A comprehensive description of the survey is in the [appendix](#) as well as [on the PIF website](#). We observe that the worst performing states are given F letter grades for their ability to limit immigration concerns in their application communications. However, only two states (California and Michigan) are given the highest grade of D, meaning that no states are using best practices to mitigate immigration concerns. There is more variation in language access policies.

For states to limit continued declines in Medicaid coverage in immigrant communities, we recommend the following policies:

1. Do not request Social Security numbers and immigration status when it violates federal policy;
2. Communicate renewal messages that address public charge and immigrant-related fears;
3. Improve compliance with federal language access laws.

In addition, reporting more specific data at the individual level about disenrollments by nativity status (as well as race) would improve analysts' ability to track coverage changes by potentially vulnerable groups. This would help track variation in insurance access through unwinding, which a recent [paper](#) found varied significantly even before unwinding (Sharer & Lukens 2024).

ⁱⁱⁱ For [table 2](#), the PIF survey was not collected in Arizona, so data is missing for it.

Table 3 shows whether Medicaid coverage has been extended to varying age groups (and if so, when) across the 10 states analyzed. We observe that California provides the most comprehensive coverage irrespective of immigration status, with New York providing coverage to children under 18 and pregnant women. Other than North Carolina, these states performed the best indicating that coverage expansions—far from making coverage retention more difficult in immigrant communities—seems to have helped mitigate unwinding coverage losses. Similarly, North Carolina expanded Medicaid to all adults with incomes under 138% of the federal poverty level in December 2023. This policy change undoubtedly explains the fact that it is ranked highest. In fact, subsequently and in contrast to all other states, North Carolina’s Medicaid enrollment increased between March 2023 and 2024. In contrast, Florida passed a more restrictive immigration law in July 2023. Based on previous research that shows immigration enforcement generates chilling effects on safety net enrollment (Alsan & Yang 2022), we surmise that this worsened the disenrollments in immigrant communities during unwinding. To confirm these hypotheses, more analysis is needed.

In states where political space exists and civil society is engaged, it is crucial to continue advocating to expand coverage, minimize burdens for all families—and especially immigrant families—by encouraging accurate automated renewal processes and collaborating with community groups on outreach that addresses immigration concerns. Another lesson is that continuous-coverage provisions work. COVID-19 showed that broad based continuous coverage can drive uninsurance to record lows. Although this broad based continuous coverage is unlikely to be politically viable, versions such as extending child continuous coverage to one year and—in a few states—up to age 6 have now passed. Advocating for continued coverage expansions and longer coverage periods will be crucial to reverse the insurance losses during unwinding. In addition, states that have not extended coverage through Medicaid expansion or to unauthorized populations would benefit from doing so, both for population health as well as their residents’ financial security. One final point: the consequences of Medicaid disenrollment affect individual-level health and financial security, but also has implications for the supply side of healthcare and economic development, since more uninsured people lead to more uncompensated care. The lack of coverage can threaten the business model for already vulnerable safety-net hospitals and health centers serving rural and low-income populations (Ehrlick 2024).

Table 2: State performance on recommended measures to mitigate coverage barriers

	IMMIGRATION CONCERNS	DATA REPORTING	LANGUAGE ACCESS	STAKEHOLDER ENGAGEMENT
State	Letter Grade	Letter Grade	Letter Grade	Letter Grade
Arizona	N/A	N/A	N/A	N/A
California	D	D	A	A
Colorado	F	F	D	F
Florida	F	F	B	F
Michigan	D	F	A	C
New Jersey	F	F	D	A
New York	F	D	B	C
North Carolina	F	F	F	C
Pennsylvania	F	F	B	F
Texas	F	F	F	F

Note: Data comes from a PIF survey in 28 states. This survey included 9 of the 10 states in the analysis above; only AZ was not measured in the survey. PIF then graded each state for across the four domains represented in each column in the table above. More information on the specific questions can be found in the appendix.

Table 3: State Medicaid policy changes during study period

	Coverage regardless of immigration status						Other Medicaid policy changes
	<18	18-25	26-49	50-64	65+	Pregnant	
CA	Full period	Jan 2020	Jan 2024	May 2022	May 2022	Full period	
NY	Full period	-	-	-	Jan 2024	Full period	Mar-Jun 2020: special enrollment period Jan 2023: increased income/resource limits Mar 2023: 12-month coverage for mothers (prev. 2 months)
NJ	Jan 2023	-	-	-	-	-	Jan 2022: CHIP premiums + waiting period eliminated
FL	-	-	-	-	-	-	Jan 2023: increased income/asset limits Jul 2023: new immigration law takes effect Dec 2023: New eligibility portal, everyone needs to make a new account Jan 2024: increased FPL cap to 300 for children under 19
TX	-	-	-	-	-	-	Sep 2021 to Mar 2022: temporarily halted payments from federal government
AZ	-	-	-	-	-	-	Jun 2021: Work requirement officially killed (never went into effect, supposed to start in 19) Sep 2022: Medicaid modernization waiver ends Feb 2023: Arizona switched to the 2023 FPL numbers (a month or two ahead of other states)
MI	-	-	-	-	-	-	Jan 2020: work requirement Mar 2020: work requirement overturned (no disenrollments)
PA	-	-	-	-	-	-	
CO	Jan 2025	-	-	-	-	Jan 2025	
NC	-	-	-	-	-	-	Jul 2021: Move to managed care plans Dec 2023: Medicaid expansion for Adults under age 65 with household income up to 138% of the poverty level

Additional Description of Methods

Medicaid unwinding enrollment data

We compile a dataset of county-level monthly Medicaid enrollment across 10 states. States were included in this analysis because they were the 10 largest states that report county-level Medicaid enrollment for our dates of interest. The 10 states are high in population as well as include large immigrant populations. Therefore, the 10 states included represent 49.6% of the U.S. population and 67.7% of the foreign-born population of the U.S. (as of 2021 ACS). We have data from the following 10 states: Arizona, California, Colorado, Florida, Michigan, New Jersey, New York, North Carolina, Pennsylvania, and Texas. All enrollment data were obtained from publicly posted datasets on state government websites and cover the time period from January 2022 through December 2023 with a few exceptions noted in the appendix. All datasets are up-to-date as of February 14th, 2024. Nationwide enrollment data are sourced from the [Kaiser Family Foundation](#), using November 2023 numbers for December 2023 (available as of 3/1/24). Four states include their CHIP program in their reported Medicaid enrollment counts, two report partial CHIP enrollment, and five either do not include CHIP or do not specify whether they do.

► **Other controls**

Since Medicaid enrollment is based on household income thresholds, poorer counties have more individuals who are program eligible. We obtained monthly county-level unemployment numbers from January 2022 through December 2023 from the Bureau of Labor Statistics (Bureau of Labor Statistics). We create indicator variables for unemployment level by dividing counties into five groups. These unemployment quintiles are unweighted and are not seasonally adjusted.

We obtained data on total county population and foreign-born county population from the American Community Survey 2021 5-year estimates. The foreign-born population includes naturalized citizens and noncitizens, though the analysis of coverage losses only applies to Medicaid-eligible individuals.^{iv} This may or may not include undocumented individuals, depending on the state (see [Table 3](#) for a breakdown of which states provide coverage regardless of immigration status). We obtained state-level unwinding timelines from the Kaiser Family Foundation. We define the beginning of unwinding as the month in which terminations begin for each state. April 2023: Arizona; May 2023: Florida, Pennsylvania; June 2023: Colorado, New Jersey, Texas; July 2023: California, Michigan, North Carolina, New York.

► **Measuring immigrant share by county**

To calculate percent enrollment, we divide Medicaid enrollment by each county's total population. To understand how Medicaid unwinding varies for communities with large immigrant populations we group all counties in our ten-state sample based on the percent of their population that is foreign born. We use population weights so that the county groups have equal total population levels. To calculate immigrant share by county, we divide foreign-born population by the total population in 2021 for each county-month. As described above, this methods leads to counties being separated into the following groups based on their foreign-born population share: lowest (immigrants account for 4% of county population), low (10% of county population), middle (16%), high (25%), and highest (36%) foreign-born population shares across our 10-state sample. Figure 1 shows the 10 states we collected data from and how each county within these states is coded based on their foreign-born population share.

► **Model Specification**

Using differences-in-differences models, we estimate the change in Medicaid enrollment after unwinding in the 10 states analyzed, comparing changes in high- compared to low-immigrant share counties. The model calculates the change in Medicaid enrollment attributable to residing in high compared to low immigrant population share counties. The outcome variable of interest is county-level Medicaid enrollment as a percentage of county population. Controls are included to adjust for state and year average Medicaid enrollment as well as each county's economic conditions, as proxied by unemployment level.

^{iv} Noncitizens include legal permanent residents, some of whom are Medicaid eligible if they have passed the 5 year bar, and other qualified immigrants that are Medicaid eligible such as refugees and asylees, as well as other not qualified immigrants and undocumented individuals who participated in the census that are not Medicaid eligible.

► **Calculating state performance in mitigating Medicaid enrollment decline among immigrants**

To calculate our measure of state performance in mitigating Medicaid disenrollment for immigrants, we take the following steps:

- 1.** Apply the county estimates of excess disenrollment by county immigrant share group (coefficients can be found in [appendix table A4](#)) to get the number of excess people disenrolling from Medicaid by county given its immigrant share group. That is, we calculate excess disenrollment by each county's Medicaid enrollment using the coefficient for each county type (highest, high, medium, and low) multiplied by that county's population.
- 2.** Sum that number across counties for each state. The weakness with this number is that it attributes more excess disenrollment to states that have larger immigrant populations and it also attributes declines among immigrants equally across states when we know that states varied significantly in their unwinding performance. The next two steps adjust for these concerns.
- 3.** To adjust for overall state performance during unwinding, we take the ratio of Medicaid decline during unwinding in a given state divided by the Medicaid decline overall in the sample and multiply that by the excess disenrollment calculated from steps 1 and 2. This assumes only that states doing worse for all individuals will also do worse for immigrants, at the same rate. We also multiply by an aggregate adjustment factor of .975 to ensure that total disenrollment remains equal to 1.368 million across all 10 states.
- 4.** To adjust for differences in immigrant population by state, divide excess disenrollment by each state's immigrant population.

These steps yield our measure of state performance for immigrants during unwinding, which represents each state's excess disenrollment among immigrants as a proportion of that state's immigration population. See [table A3](#) in the appendix for the equation used for this calculation and [table 1](#), columns 2 and 3 for results.

[Table 4](#) below shows the calculations described above step by step. In [table 4](#), column 2 indicates excess disenrollment calculated by each county's foreign-born population share aggregated to the state level (steps 1 and 2 above). Columns 3 and 4 show the percentage point change in overall Medicaid enrollment from March to December 2023 and that decline as a ratio of the total enrollment decline across the 10 states March to December 2023, respectively. Columns 5 and 6 calculate excess disenrollment by state by adjusting for the ratio of overall Medicaid disenrollment March to December 2023 (column 4) and multiplying by an aggregate adjustment factor of .975 to ensure that total disenrollment remains equal to 1.369 across all 10 states (step 3 above). This step ensures that excess disenrollment is adjusted for state performance during unwinding. Finally, we divide the total excess disenrollment adjusted for state performance in column 6 by the state's total foreign born population (column 7, step 4 above). This yields our preferred measure of state performance on excess disenrollment in higher immigrant share counties during unwinding (column 8): performance-adjusted excess disenrollment in higher immigrant share counties as percentage of a state's immigrant population.

To illustrate with an example from [table 4](#) below, we describe how this works for New Jersey. Just using the county-level coefficients (see [table A4](#)) applied to New Jersey's counties by immigrant population share and summed across the state generates an excess disenrollment of -109,977 (column 2, [table 4](#)). Then we adjust for state performance overall during Medicaid unwinding. New Jersey experienced an overall decline in Medicaid enrollment during

unwinding of 8.31%, which is 0.75 of the total Medicaid enrollment decline in the 10 state sample ($8.31 / 11.02 = 0.7541$). We then multiply -109,977 by this ratio and the aggregate factor adjustment (0.9745) to adjust for state performance and ensure the total disenrollment decline remains equal to 1.368 million. This yields our adjusted disenrollment for New Jersey of -80,822. Multiplying the numbers in the table will not equal the excess disenrollment calculations exactly because numbers in the table are rounded for exposition.

We also note that total Medicaid enrollment in the 10-state sample declined by 5.6 million from April to December 2023. By state, the highest overall Medicaid enrollment decline in aggregate numbers as well as a percent of peak enrollment was in Texas at 1.5 million, a 26% decline from March 2023. California experienced the second largest overall decline of 1.1 million, a decrease of 7%, and Florida enrollment declined by 910,000 enrollees or 16% from peak.

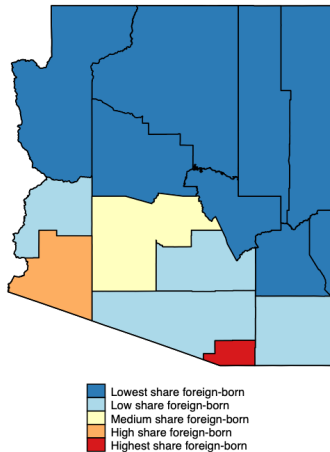
Table 4: Summary of the number of additional people that lost Medicaid coverage in counties with higher immigrant population shares per state and over the 10-state sample - detailed calculations

State	Excess disenrollment	% change in overall Medicaid enrollment March - Dec 2023	Ratio of state enrollment decline to enrollment decline	Excess disenrollment with state performance adjustment	Excess disenrollment with state performance and aggregate factor adjustment	Foreign-born pop.	Excess disenrollment as % of foreign-born pop.
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
TX	-201,239	-25.94%	2.35	-473,697	-461,644	4,904,169	-9.4%
FL	-189,264	-15.76%	1.43	-270,672	-263,784	4,478,419	-5.9%
CO	-18,339	-19.66%	1.78	-32,717	-31,885	545,464	-5.8%
AZ	-39,120	-11.54%	1.05	-40,966	-39,924	922,119	-4.3%
NJ	-109,977	-8.31%	0.75	-82,932	-80,822	2,115,061	-3.8%
PA	-31,185	-11.35%	1.03	-32,119	-31,302	924,624	-3.4%
MI	-23,343	-11.11%	1.01	-23,534	-22,935	697,343	-3.3%
CA	-520,999	-6.88%	0.62	-325,270	-316,993	10,454,949	-3.0%
NY	-209,353	-5.95%	0.54	-113,035	-110,159	4,523,896	-2.4%
NC	-25,555	-3.95%	0.36	-9,160	-8,927	845,983	-1.1%
10-states	-1,368,374	-11.02%	1.00	-1,404,101	-1,368,374	30,412,027	-4.5%

Note: Table shows the number of additional people that lost Medicaid coverage in counties with higher immigrant population shares per state and over the 10-state sample because of each state's Medicaid unwinding implementation policies. Overall Medicaid enrollment decline is measured from April 2023, immediately before unwinding began, to December 2023.

Summary of Findings by State

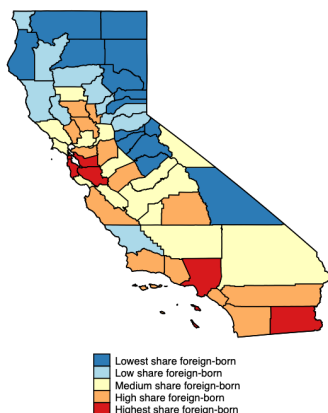
Foreign-born Share by County Arizona



Arizona: Arizona experienced an overall decline in Medicaid enrollment of 11.5% from March to December 2023. Adjusted excess disenrollment in Arizona compared to the lowest immigrant-share counties was 39,924, which represents a decline of 4.3% of the state's foreign-born population. This performance ranked Arizona as the fourth worst among the 10 states analyzed. When it comes to policy generosity, Arizona does not provide Medicaid coverage to any population group irrespective of immigration status. Data from Arizona was not collected in the PIF survey on addressing immigration concerns and providing language access.

County	Total enrollment	Foreign-born quintile	Excess Disenrollment
Santa Cruz	27,030	Highest	-541
Yuma	108,424	High	-1,193

Foreign-born Share by County California

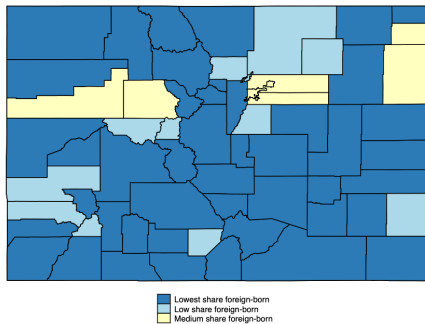


California: California experienced an overall decline in Medicaid enrollment of 6.9% from March to December 2023. Adjusted excess disenrollment in California compared to the lowest immigrant-share counties was -316,993, which represents a decline of 3% of the state's foreign-born population. This performance ranked California as the third best among the 10 states analyzed. California provides extensive Medicaid coverage irrespective of immigration status and was rated highly for its language access and stakeholder engagement policies. However, it could still improve on addressing immigration concerns during the enrollment process as well as reporting data by nativity to ensure better monitoring of Medicaid coverage changes in the future.

County	Total enrollment	Foreign-born quintile	Excess Disenrollment
Alameda	508,239	Highest	-10,165
Colusa	11,870	High	-131
Contra Costa	337,918	High	-3,717
Imperial	111,588	Highest	-2,232
Los Angeles	4,701,075	Highest	-94,022
Merced	162,009	High	-1,782
Monterey	228,087	High	-2,509
Napa	39,677	High	-436
Orange	1,074,569	High	-11,820
Riverside	1,052,656	High	-11,579

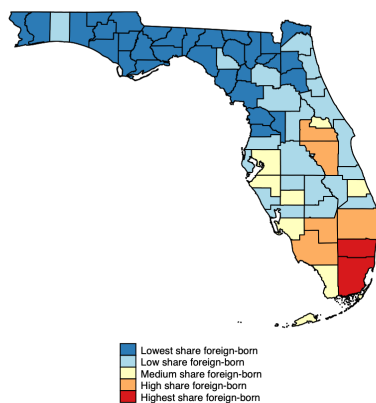
County	Total enrollment	Foreign-born quintile	Excess Disenrollment
San Diego	1,078,944	High	-11,868
San Francisco	260,387	Highest	-5,208
San Joaquin	344,102	High	-3,785
San Mateo	175,478	Highest	-3,510
Santa Barbara	181,106	High	-1,992
Santa Clara	515,056	Highest	-10,301
Sutter	48,328	High	-532
Tulare	297,370	High	-3,271
Yolo	66,116	High	-727

Foreign-born Share by County Colorado



(no counties in high or highest quintiles foreign-born)

Foreign-born Share by County Florida

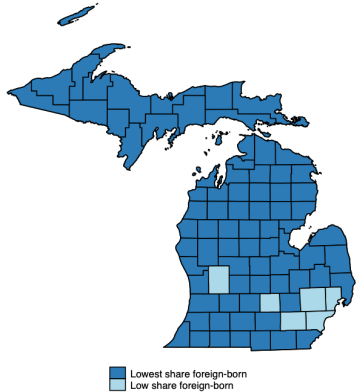


Colorado: Colorado experienced an overall decline in Medicaid enrollment of about 20% from March to December 2023. Adjusted excess disenrollment in Colorado compared to the lowest immigrant-share counties was -31,885, which represents a decline of close to 6% of the state’s foreign-born population. This performance ranked Colorado as the third worst among the 10 states analyzed with a very similar performance to Florida. Colorado received an F in addressing immigration concerns during enrollment and re-enrollment and a D in language access. Although beyond our data period, Colorado will begin providing access to Medicaid irrespective of immigration status for children under 18 and this is likely to improve performance.

Florida: Florida experienced an overall decline in Medicaid enrollment of about 16% from March to December 2023. Adjusted excess disenrollment in Florida compared to the lowest immigrant-share counties was -263,784, which represents a decline of close to 6% of the state’s foreign-born population. This performance ranked Florida as the second worst among the 10 states analyzed with a very similar performance to Colorado. Florida received an F in addressing immigration concerns during enrollment and re-enrollment and a B in language access. Florida’s passage of SB 1718, which took effect in July 2023, expanded immigration enforcement, required hospitals to collect immigration status, and invalidated drivers’ licenses for undocumented immigrants. These measures, among others included in the law, likely generated a chilling effect on use of safety-net programs among Medicaid-eligible immigrants and their families (Pillai & Artiga 2023).

County	Total enrollment	Foreign-born quintile	Excess Disenrollment
Broward	490,132	Highest	-9,803
Collier	68,751	High	-756
Dade	985,156	Highest	-19,703
Hendry	18,813	High	-207
Orange	386,488	High	-4,251
Osceola	150,830	High	-1,659
Palm Beach	339,543	High	-3,735

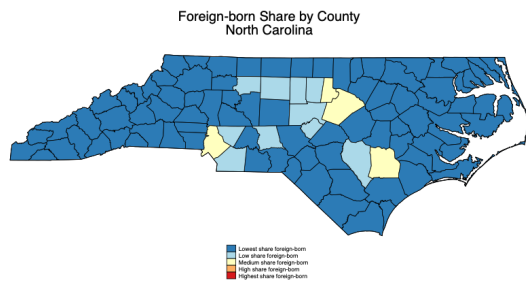
Foreign-born Share by County Michigan



(no counties in high or highest quintiles foreign-born)

Michigan: Michigan experienced an overall decline in Medicaid enrollment of 11% from March to December 2023. Adjusted excess disenrollment in Michigan compared to the lowest immigrant-share counties was -22,935, which represents a decline of 3.3% of the state's foreign-born population. This performance ranked Michigan in the middle of the pack, 4th best among the 10 states analyzed. Michigan received a D in addressing immigration concerns during enrollment and re-enrollment and an A in language access, the only A in language access other than California. When it comes to policy generosity, Michigan does not provide Medicaid coverage to any population group irrespective of immigration status.

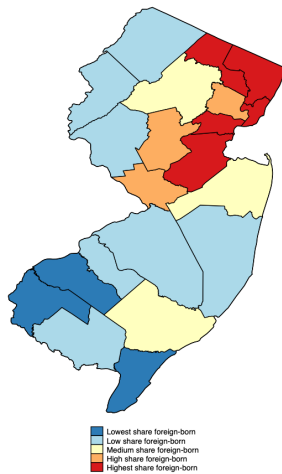
Foreign-born Share by County North Carolina



(no counties in high or highest quintiles foreign-born)

North Carolina: North Carolina experienced an overall decline in Medicaid enrollment of 4% from March to December 2023. Adjusted excess disenrollment in North Carolina compared to the lowest immigrant-share counties was -8,927, which represents a decline of 1.1% of the state's foreign-born population. This performance ranked North Carolina as the best among the 10 states analyzed. North Carolina received an F in addressing immigration concerns during enrollment and re-enrollment and an F in language access. However, these weaknesses were likely superseded by Medicaid expansion, which began in December 2023 and increased the income thresholds for Medicaid eligibility from 0% of the federal poverty level (FPL) for childless adults and 37% of FPL for parents to 138% of FPL for both groups. This undoubtedly limited the negative effects of Medicaid unwinding for counties with higher immigrant shares and throughout the state.

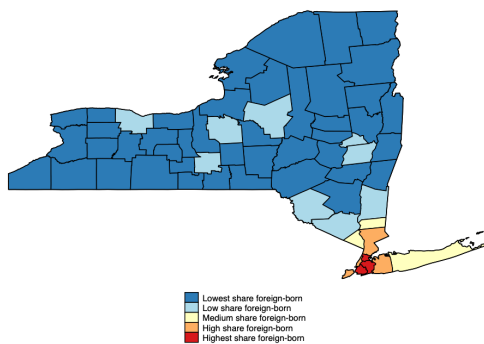
Foreign-born Share by County New Jersey



New Jersey: New Jersey experienced an overall decline in Medicaid enrollment of 8% from March to December 2023. Adjusted excess disenrollment in New Jersey compared to the lowest immigrant-share counties was -80,822, which represents a decline of close to 4% of the state's foreign-born population. This performance ranked New Jersey in the middle of the pack at 5th among the 10 states analyzed. New Jersey received an F in addressing immigration concerns during enrollment and re-enrollment and a D in language access. New Jersey also began providing access to Medicaid irrespective of immigration status for children under 18 in January 2023.

County	Total enrollment	Foreign-born quintile	Excess Disenrollment
Bergen	134,480	Highest	-2,690
Essex	259,556	High	-2,855
Hudson	199,343	Highest	-3,987
Mercer	84,012	High	-924
Middlesex	157,861	Highest	-3,157
Passaic	174,693	Highest	-3,494
Somerset	39,560	High	-435
Union	128,625	Highest	-2,573

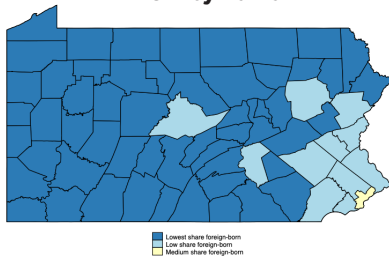
Foreign-born Share by County New York



New York: New York experienced an overall decline in Medicaid enrollment of 6% from March to December 2023. Adjusted excess disenrollment in New York compared to the lowest immigrant-share counties was -110,159, which represents a decline of 2.4% of the state's foreign-born population. This performance ranked New York as second best among the 10 states analyzed. New York received an F in addressing immigration concerns during enrollment and re-enrollment and a B in language access. New York also provides Medicaid access irrespective of immigration status for children under 18 and pregnant persons. In January 2024, it also expanded eligibility irrespective of status to individuals ages 65 and over.

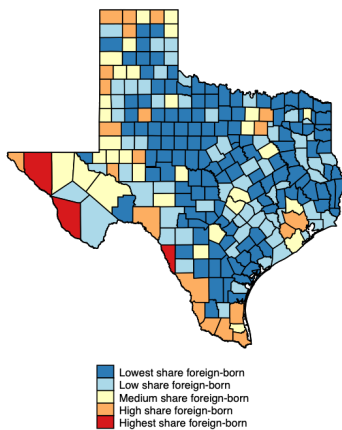
County	Total enrollment	Foreign-born quintile	Excess Disenrollment
Bronx	1,017,515	Highest	-20,350
Kings (Brooklyn)	1,433,541	Highest	-28,671
Nassau	350,698	High	-3,858
New York (Manhattan)	534,276	High	-5,877
Queens	1,221,819	Highest	-24,436
Richmond (Staten Island)	193,276	High	-2,126
Westchester	274,580	High	-3,020

Foreign-born Share by County Pennsylvania



(no counties in high or highest quintiles foreign-born)

Foreign-born Share by County Texas



Pennsylvania: Pennsylvania experienced an overall decline in Medicaid enrollment of 11% from March to December 2023. Adjusted excess disenrollment in Pennsylvania compared to the lowest immigrant-share counties was 31,302, which represents a decline of 3.4% of the state's foreign-born population. This performance ranked Pennsylvania as 5th among the 10 states analyzed.

Texas: Texas experienced an overall decline in Medicaid enrollment of 26% from March to December 2023. Adjusted excess disenrollment in Texas compared to the lowest immigrant-share counties was -461,644, which represents a decline of 9.4% of the state's foreign-born population. This performance ranked Texas worst among the 10 states analyzed and by a wide margin. The next closest states experienced excess disenrollments equal to 6% of their foreign-born population. Texas received an F in addressing immigration concerns during enrollment and re-enrollment and an F in providing language access. Texas does not provide Medicaid coverage to any population group irrespective of immigration status.

County	Total enrollment	Foreign-born quintile	Excess Disenrollment
Bailey	1,852	High	-20
Cameron	143,482	High	-1,578
Collin	98,686	High	-1,086
Crane	1,006	High	-11
Dallam	1,608	High	-18
Dallas	558,413	High	-6,143
El Paso	217,408	High	-2,391
Fort Bend	116,737	High	-1,284
Gaines	5,278	High	-58
Garza	1,072	High	-12
Glasscock	160	High	-2
Harris	1,033,829	High	-11,372

County	Total enrollment	Foreign-born quintile	Excess Disenrollment
Hidalgo	308,904	High	-3,398
Hudspeth	1,332	Highest	-27
Kenedy	56	High	-1
Maverick	22,102	Highest	-442
Moore	4,414	High	-49
Ochiltree	1,702	High	-19
Parmer	1,877	High	-21
Presidio	1,944	Highest	-39
Sherman	468	High	-5
Starr	27,619	High	-304
Val Verde	13,895	High	-153
Webb	93,594	High	-1,030

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Appendix

Table A1: State Data Used

State	Dates available	Date of first terminations
Arizona	January 2022 through December 2023	April 2023
California	January 2022 through December 2023	July 2023
Colorado	January 2022 through December 2023	June 2023
Florida	January 2022 through December 2023	May 2023
Michigan	January 2022 through December 2023	July 2023
New Jersey	January 2022 through December 2023	June 2023
New York	January 2022 through December 2023	July 2023
North Carolina	January 2022 through December 2023	July 2023
Pennsylvania	January 2022 through December 2023	May 2023
Texas	January 2022 through November 2023 December 2023 (imputed)	June 2023

Table A2: Descriptive Statistics by County Immigrant Share

	% foreign-born	Mean	Standard Deviation	Minimum	Maximum
% foreign-born	Lowest	3.6%	1.9%	0.0%	7.6%
	Low	9.9%	1.6%	7.6%	13.1%
	Medium	16.3%	2.5%	13.1%	21.1%
	High	24.7%	2.4%	21.1%	29.4%
	Highest	36.4%	6.3%	29.5%	54.0%
	Total	8.0%	7.8%	0.0%	54.0%
% unemployment	Lowest	4.1%	1.4%	0.3%	22.6%
	Low	3.8%	1.0%	1.5%	8.0%
	Medium	3.8%	1.5%	0.4%	9.8%
	High	4.8%	2.6%	1.8%	19.2%
	Highest	5.1%	3.1%	1.4%	19.8%
	Total	4.1%	1.5%	0.3%	22.6%
% English-only	Lowest	86.1%	8.4%	28.6%	97.2%
	Low	74.7%	9.6%	33.8%	87.7%
	Medium	62.2%	12.9%	10.6%	78.7%
	High	49.5%	15.0%	7.0%	67.4%
	Highest	40.3%	13.8%	9.7%	56.3%
	Total	78.5%	15.7%	7.0%	97.2%
% under 150% of FPL	Lowest	22.7%	6.3%	1.2%	48.1%
	Low	22.2%	7.6%	5.1%	57.3%
	Medium	21.9%	8.8%	8.0%	47.4%
	High	23.2%	9.0%	8.4%	49.6%
	Highest	23.7%	10.9%	10.1%	53.3%
	Total	22.6%	7.2%	1.2%	57.3%
Median income	Lowest	29,428	4,832	17,404	56,786
	Low	32,489	7,003	14,458	56,682
	Medium	35,339	8,159	18,020	59,463
	High	34,060	8,342	17,324	54,421
	Highest	36,148	12,825	12,958	59,017
	Total	30,986	6,584	12,958	59,463
Total population	Lowest	67,625	106,174	83	1,246,116
	Low	225,170	309,011	698	1,990,522
	Medium	477,617	715,846	229	4,367,186
	High	751,471	989,261	169	4,697,957
	Highest	1,546,810	2,147,466	3,322	10,019,635
	Total	212,843	574,489	83	10,019,635
% enrollment	Lowest	25.9%	8.6%	6.4%	72.2%
	Low	24.4%	9.6%	6.5%	56.0%
	Medium	27.2%	11.9%	1.7%	57.7%
	High	30.3%	12.5%	7.2%	63.6%
	Highest	35.4%	14.6%	12.8%	70.3%
	Total	26.2%	9.8%	1.7%	72.2%

Note: Quintiles are defined based on the percentage of the county's population that is foreign-born.
Quintiles are created using population weights.

Table A3: Estimating equation and calculation of the state performance measure

Estimating equation: The difference-in-differences estimating equation we run is the following:

$$\begin{aligned} Medicaid\ enrollment_{ct} = & \alpha + \sum_{q=2}^5 \lambda_q * immigrant\ share_c + \rho * unwinding_s \\ & + \sum_{q=2}^5 \beta_q * immigrant\ share_c * unwinding_s + \sum_{q=2}^5 \phi_q * unemployment_{ct} + month_t + state_s + \varepsilon_{ct} \end{aligned}$$

where the outcome variable is Medicaid enrollment per capita in county c in month t . The first set of control variables (immigrant share) adjust for differences in Medicaid enrollment by a county's immigrant share q (low, medium, high, and highest) compared to the lowest immigrant share counties. The variable unwinding controls for the average change in Medicaid enrollment after Medicaid unwinding starts across states. Additional controls are included for each state's unemployment quintile over time ($unemployment_{ct}$) to adjust for economic conditions, as well as month and state fixed effects to adjust for time- and state-specific averages.

Our treatment effects of interest are the four β_q 's estimated by interacting county immigrant share with state unwinding. These coefficients reflect the differential change in Medicaid enrollment per capita after unwinding for counties in the highest, high, medium, and low immigrant share groups compared to the lowest immigrant share counties. For example, the -0.0203 regression coefficient shown in the regression table below (table A4) for the highest immigrant share group indicates that Medicaid enrollment declined by 2.03 percentage points more in the highest immigrant share counties compared to the lowest share counties, all else equal.

State performance measure: The state performance measure we use to rank states is calculated in the following way:

$$State\ performance_s = \left[\sum_{c=1}^S (\beta_q * pop_c) \right] * \frac{\% \Delta Enrollment_s}{\% \Delta Enrollment_{vs}} / Foreign\ Born\ Pop_s$$

where β_q represents the differential change in Medicaid enrollment post unwinding for county c by foreign-born group q (highest, high, medium, low) compared to the lowest-immigrant share counties calculated from equation 1 above. The unwinding performance indicator (the middle term) is the ratio of each state's Medicaid enrollment decline (in percent) April to December 2023 divided by the Medicaid enrollment decline April to December 2023 (in percent) across all 10 states in the sample. To adjust for differences in each state's foreign born population, we divide each state's excess disenrollment by that state's foreign born population. The resulting value represents our measure of state performance in mitigating the negative effects of Medicaid unwinding in the highest, high, medium, and low immigrant share counties compared to the lowest share counties.

Table A4: Regression tables for Medicaid unwinding by county immigrant share

VARIABLES	Foreign-born
Low foreign-born share	0.00998 (0.00917)
Medium foreign-born share	0.0341* (0.0148)
High foreign-born share	0.0197 (0.0118)
Highest foreign-born share	0.0638*** (0.0164)
Terminations begin	0.0133*** (0.00240)
Low foreign-born share x Terminations begin	-0.00444 (0.00342)
Medium foreign-born share x Terminations begin	-0.00660 (0.00440)
High foreign-born share x Terminations begin	-0.0110* (0.00557)
Highest foreign-born share x Terminations begin	-0.0203** (0.00736)
Low unemployment	0.0485*** (0.00572)
Medium unemployment	0.104*** (0.0111)
High unemployment	0.165*** (0.0132)
Highest unemployment	0.271*** (0.0225)
Constant	0.283*** (0.0163)
Observations	15,681
R-squared	0.746

Robust standard errors in parentheses

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

Note: Quintiles are defined using the percentage of the county's population that is **foreign-born**.

Additional background on PIF survey data methodology

Definition of policies

Immigration concerns: Policy related to immigration concerns is measured using the following 4 questions related to how the state informs individuals about immigration concerns and asks for potentially sensitive data. The questions ask:

1. whether renewal-related communications include messages that address public charge or other immigration status-related concern
2. whether a state's pre-populated renewal form include information that is already known to the state and unlikely to change such as citizenship, immigration status, and SSN, rather than asking them to provide this information again to complete the renewal
3. in cases where a Medicaid enrollee's immigration status may change, measures whether a state uses information it already has about the person to re-verify immigration status electronically through SAVE before requiring an enrollee to provide documentation to complete the renewal,
4. measures whether states ask for citizenship or immigration status only from the individuals applying for or renewing coverage (i.e., rather than asking for parents' info when they are only applying for their children).

Data reporting: Measures whether states report disenrollments and other redetermination information by the person's primary language, by ZIP Code, or race / ethnicity.

Language Access: Measured using the 6 questions below and aggregated to an index ranging from 0 to 6.

1. Is your state conducting outreach about the unwinding in languages other than English?
2. Does your state's call center connect people with in-language assistance?
3. When people seek out assistance in person at Medicaid agencies in your state, can they access multilingual staff or interpreters?
4. Does your state provide in-language taglines on mailed notices detailing how to receive in-language assistance?
5. Does your state send notices in languages identified as preferred by people applying to renew coverage?
6. Does your state offer an option for people with limited English proficiency to renew online or through a mobile device in a language other than English?

Stakeholder Engagement: This measure asks two questions:

1. Is your state sharing information about its unwinding policies and practices with advocates and other trusted organizations that serve immigrant families?
2. Is your state inviting those organizations to share concerns and suggestions for improvement?